



[4910-13]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Parts 43, 91 and 145

#### Repair Stations

**Docket No. FAA-2006-26408; Notice No. 12-03**

**RIN 2120-AJ61**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This action would amend the regulations for repair stations by revising the system of ratings, the repair station certification requirements, and the regulations on repair stations providing maintenance for air carriers. This action is necessary because many portions of the existing repair station regulations do not reflect current repair station aircraft maintenance and business practices, or advances in aircraft technology. These changes would modernize the regulations to keep pace with current industry standards and practices.

**DATES:** Send your comments on or before [Insert date 90 days after date of publication in the Federal Register].

**ADDRESSES:** You may send comments identified by Docket Number FAA-2006-26408 using any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the online instructions for sending your comments electronically.

- Mail: Send comments to Docket Operations, M-30; U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Room W12-140, West Building Ground Floor, Washington, DC 20590-0001.
- Hand Delivery or Courier: Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: Fax comments to Docket Operations at 202-493-2251.

*Privacy*: The FAA will post all comments it receives, without change, to <http://www.regulations.gov>, including any personal information the commenter provides. Using the search function of the docket web site, anyone can find and read the electronic form of all comments received into any FAA dockets, including the name of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). DOT's complete Privacy Act Statement can be found in the Federal Register published on April 11, 2000 (65 FR 19477-19478), as well as at <http://DocketsInfo.dot.gov>.

*Docket*: Background documents or comments received may be read at <http://www.regulations.gov> at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** For technical questions concerning this proposed rule contact John Goodwin, FAA, Repair Station Branch (AFS-340), 800 Independence Avenue SW, Washington D.C., 20591; telephone (202) 385-6417; facsimile

(202) 385-6474; e-mail [John.J.Goodwin@faa.gov](mailto:John.J.Goodwin@faa.gov). For legal questions concerning this proposed rule contact Edmund Averman, FAA, Office of the Chief Counsel (AGC-210), 800 Independence Avenue SW, Washington, D.C.20591; telephone (202) 267-3147; facsimile (202) 267-5106; e-mail [Ed.Averman@faa.gov](mailto:Ed.Averman@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

Later in this preamble under the Additional Information section, we discuss how you can comment on this proposal and how we will handle your comments. Included in this discussion is related information about the docket, privacy, and the handling of proprietary or confidential business information. We also discuss how you can get a copy of related rulemaking documents.

#### **Authority for this Rulemaking**

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

This rulemaking is promulgated under the authority described in title 49, subtitle VII, part A, subpart III, section 44701, General requirements, and Section 44707, Examining and rating air agencies. Under section 44701, the FAA may prescribe regulations and standards in the interest of safety for inspecting, servicing, and overhauling aircraft, aircraft engines, propellers, and appliances. It may also prescribe equipment and facilities for, and the timing and manner of, inspecting, servicing, and overhauling these items. Under section 44707, the FAA may examine and rate repair stations.

This regulation is within the scope of section 44701 since it establishes new regulations for a repair station to have permanent housing for all its facilities, equipment, materials, and personnel. This regulation is within the scope of section 44707 since it revises the system of ratings for repair stations and specifies those instances when the FAA may deny the issuance of a repair station certificate, especially when a previously held certificate has been revoked.

## **I. Background**

In 1989, the FAA held four public meetings to provide a forum for the public to comment on possible revisions to the rules governing repair stations. After considering the comments and data collected from these meetings, the FAA published a notice of proposed rulemaking in June 1999 (1999 NPRM).<sup>1</sup> The 1999 NPRM proposed significant changes to part 145 because the existing language was no longer appropriate and had become increasingly difficult to administer.

In August 2001, the FAA published a final rule with request for comments and direct final rule with request for comments; final rule.<sup>2</sup> This final rule revised most of part 145 as proposed in the 1999 NPRM. However, it did not adopt the proposed revised repair station ratings and the quality assurance system due to the volume of negative comments received on the FAA's proposed changes to these areas.

On October 19, 2001, the FAA tasked the Aviation Rulemaking Advisory Committee (ARAC) to address ratings and quality assurance for repair stations.<sup>3</sup> ARAC provided its recommendations in May 2002.<sup>4</sup>

---

<sup>1</sup> 64 FR 33142; June 21, 1999

<sup>2</sup> 66 FR 41088; August 6, 2001

<sup>3</sup> 66 FR 53281; October 19, 2001

On December 1, 2006, the FAA published the NPRM titled “Repair Stations” (2006 NPRM) that addressed ARAC’s recommendations.<sup>5</sup> The original comment period was scheduled to close on March 1, 2007. However, the FAA received a request from the Aeronautical Repair Station Association to extend the comment period. In a notice published on February 27, 2007, the FAA granted a 45-day comment period extension to April 16, 2007.<sup>6</sup> The 2006 NPRM proposed the following changes to part 145:

- The system of ratings and classes would be revised significantly, including the creation of an avionics rating and the end of the issuance of limited ratings (to be replaced by the issuance of limitations to the rating a repair station holds).
- Each repair station would set up and maintain a capability list of all articles for which it is rated. The list would identify each article by manufacturer and the type, make, model, category, or other nomenclature designated by the article’s manufacturer. A repair station with an avionics or a component rating would also be required to organize its lists by category of the article.
- Each repair station would set up a quality system that includes an internal evaluation that reviews the complete repair station yearly.
- Applicants for a repair station certificate would include a letter of compliance as part of their application.
- Each repair station would be required to provide permanent housing for its facilities, equipment, materials, and personnel.
- Each repair station would be required to designate a chief inspector.

---

<sup>4</sup> A copy of the ARAC’s recommendations can be found at [http://www.faa.gov/regulations\\_policies/rulemaking/committees/arac/](http://www.faa.gov/regulations_policies/rulemaking/committees/arac/)

<sup>5</sup> 71 FR 70254; December 1, 2006

<sup>6</sup> 72 FR 8641; February 27, 2007

- The FAA would use certification from an authority “acceptable to the FAA” as a basis for issuing a certificate to a person located outside the United States.
- The FAA would identify reasons it could use to deny the issuance of a repair station certificate.

The FAA received more than 150 public comment submissions to the 2006 NPRM. While there was general support for revising the repair station rules, several commenters asked the FAA to withdraw the proposal. Many other commenters expressed concerns related to the proposed ratings system (particularly the proposed avionics rating), the capability list, quality system, letter of compliance, chief inspector, housing and facilities, and the FAA’s denial of a repair station certificate.

On May 7, 2009, the FAA withdrew the 2006 NPRM because it did not adequately address the current repair station operating environment, which had changed significantly since the recommendations developed in 2001 by ARAC.<sup>7</sup> The FAA also noted that the withdrawal would give the FAA time to thoroughly review and properly address these substantial operating environment changes and the many issues raised by the commenters.

The withdrawal notice stated that the FAA had started rulemaking to update and revise the regulations for repair stations to more fully address the significant changes in the repair station business model. This NPRM is the result of those efforts.

### **General Discussion of the Proposal**

There are three major areas that this proposal will address:

- The system of ratings.
- The certification requirements.

---

<sup>7</sup> 74 FR 21287, May 7, 2009

- Repair stations providing maintenance for air carriers.

In addition, there are several other areas in part 145 that this NPRM will address. These are discussed in detail in an “Other Changes” section in the “Discussion of the Proposed Regulatory Requirements” portion of this preamble.

In the 2006 NPRM, the FAA proposed to require a formal quality system for all repair stations. While the FAA continues to believe that all repair stations should have a formal quality system to improve safety, the agency did not include such a requirement in this proposal. The FAA is in the process of introducing Safety Management Systems (SMS) rules, and it is anticipated that a future SMS rule will cover those repair stations operating under part 145. If the agency includes a quality system requirement in the final rule resulting from this proposal, a possibility exists that such systems would have to be modified once an SMS rule is formalized. The FAA does not believe this would be an efficient use of repair station resources based on the unknown differences that may arise.

#### **Total Benefits and Costs of this Rule.**

The total costs of this proposal would be relatively small (\$14.493 million over a 10-year period, spread amongst approximately 5,000 repair stations), but it is difficult to quantify the benefits. We believe, however, that the potential benefits, which derive in part from (1) giving the FAA authority to (a) deny a repair station certificate to an applicant whose past performance resulted in a revocation, and (b) revoke all FAA-issued certificates of any person who makes fraudulent or intentionally false entries or records; (2) defining what operations specifications consist of and providing a well-defined process for both industry and the FAA to amend them; and (3) updating the ratings system, justify the costs of the proposed rule.

The current rule provides that, with certain unrelated restrictions, an applicant who meets the requirements of the rule is entitled to a repair station certificate regardless of a past regulatory non-compliance history. Because of at least one incident where the FAA revoked a repair station certificate for serious maintenance-related safety violations, and a key management official from that repair station shortly thereafter obtained a new repair station certificate under which improper maintenance resulted in a fatal accident, the National Transportation Safety Board (NTSB) recommended that a certificate applicant's past performance should be a consideration in determining whether a new certificate should be issued. That criteria currently applies to air carrier certificate applicants. The FAA agrees with the NTSB, and is proposing rules similar to those for air carriers in the hopes of preventing accidents like the one just described.

Although the current rule provides that no person may operate without, or in violation of, FAA-issued operations specifications, it does not define the term or explain what they consist of. Much confusion prevails within the repair station community and the FAA whether any or all of a repair station's operations specifications are considered part of its certificate and therefore entitled to NTSB review of any FAA-mandated changes to them. This proposed rule would make clear what operations specifications are and which ones are part of a repair station's certificate. It would also provide detailed processes for both FAA-initiated and repair station-initiated amendments to them. This would benefit both the repair station community and the FAA by providing a degree of certainty where currently there is only confusion.

In addition, the current ratings system dates to the 1930's and 1940's, and does not adequately address the way current aircraft are constructed. This hampers the FAA's



ability to appropriately and consistently issue ratings, and it impedes repair stations' ability to accurately describe the work they perform. The repair station community and the FAA have struggled, and continue to struggle, with the application of current technology and business practices to an antiquated rule. The proposed rule would accommodate current advanced technologies and provide regulatory flexibility to accommodate future technological development.

## **1. System of Ratings**

Part 145's system of ratings does not address current technology or industry practices. It is not dynamic and cannot adapt as new technologies are introduced. It is also not defined clearly and is open to inconsistent interpretation and application. These failings have resulted in repair stations having a variety of ratings to perform the same work. This system is confusing to repair station operators and their customers, and presents increasingly difficult certificate management challenges to the FAA.

The rating changes proposed in the 2006 NPRM generated many comments. Most of those commenters were concerned that the proposed system of ratings would require a repair station to get FAA approval before changing or adding to the proposed required capability list. This proposal would not require a capability list, but would revise the capability list recording requirements for those repair stations who choose to use one. This is a potentially marked change for repair stations with class ratings that do not currently have a capability list of the items they maintain.

Under this proposal, the system of ratings would be reduced from eight ratings to five ratings. The ratings definitions would be revised to clearly indicate the type of work

that a repair station is authorized to perform. A comparison of the proposed ratings with the current ratings follows:

CURRENT	PROPOSED
<b>Airframe Class</b> <ol style="list-style-type: none"> <li>1. Composite Small</li> <li>2. Composite Large</li> <li>3. All-Metal Small</li> <li>4. All-Metal Large</li> </ol>	<b>Airframe Category</b> <ol style="list-style-type: none"> <li>1. Aircraft certificated under part 23 or 27</li> <li>2. Aircraft certificated under part 25 or 29</li> <li>3. All other aircraft</li> </ol>
<b>Powerplant Class</b> <ol style="list-style-type: none"> <li>1. Reciprocating Engines of 400 HP or less</li> <li>2. Reciprocating Engines of more than 400 HP</li> <li>3. Turbine Engines</li> </ol>	<b>Powerplant Category</b> <ol style="list-style-type: none"> <li>1. Reciprocating engines</li> <li>2. Turbine engines</li> <li>3. Auxiliary Power Units</li> <li>4. All other powerplants</li> </ol>
<b>Propeller Class</b> <ol style="list-style-type: none"> <li>1. All Fixed and Ground-Adjustable</li> <li>2. All other propellers</li> </ol>	<b>Propeller Category</b> <ol style="list-style-type: none"> <li>1. Fixed-pitch and ground-adjustable propellers</li> <li>2. Variable-pitch propellers</li> <li>3. All other propellers</li> </ol>
<b>Radio Class</b> <ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Navigation</li> <li>3. Radar</li> </ol>	<b>Component</b>
<b>Instrument Class</b> <ol style="list-style-type: none"> <li>1. Mechanical</li> <li>2. Electrical</li> <li>3. Gyroscopic</li> <li>4. Electronic</li> </ol>	<b>Component</b>
<b>Accessory Class</b> <ol style="list-style-type: none"> <li>1. Mechanical</li> <li>2. Electrical</li> <li>3. Electronic</li> </ol>	<b>Component</b>
<b>Limited Rating Specialized Service</b>	<b>Specialized Service</b>
<b>Limited Ratings (§ 145.61(b) lists 12 possible limited ratings)</b>	<b>Eliminated</b>

## 2. Certification Requirements

The 2006 NPRM proposed that the FAA could deny an application for a repair station certificate if the applicant previously held a repair station certificate that had been revoked or if the applicant or certain key individuals who would exercise control over the new repair station had materially contributed to the circumstances that resulted in a prior repair station certificate revocation action. This proposal was similar to the authority contained in part 119 authorizing the FAA to deny applications for air carrier and commercial operator certificates. The commenters who opposed this proposal stated it was too open-ended and that it would be impossible to maintain a tracking list of disqualifying individuals.

While the FAA understands the commenters' concerns, the agency believes this requirement should be implemented. The FAA will add a question to the repair station application asking whether the applicant has a repair station certificate currently being revoked, or previously held a repair station certificate that was revoked as described in § 145.1051(e). The FAA notes that denial is not automatic. If the agency were to deny a certificate to an applicant under the proposed rule, the affected person could appeal that denial under the procedures provided in 14 CFR part 13.

The FAA is also proposing to clarify the certification requirements in § 145.51(b) on the equipment, personnel, technical data, and housing and facilities that must be in place for inspection at the time of certification or rating approval by the FAA. There has been much confusion about how a repair station can meet these requirements by contract. The FAA is proposing language to clarify that the contract applies only to ownership, and not to the demonstration phase of certification. If a repair station does not permanently possess these items, it must be able to demonstrate to the FAA that it has made arrangements with

another person to provide such items whenever they are needed to perform work, and it must display these items and all associated lease agreements during certification.

### **3. Repair Stations Providing Maintenance for Air Carriers**

In response to the 2006 NPRM, several repair stations that provide maintenance for air carriers raised concerns on the information that air carriers must provide. Currently, § 145.205 states a repair station working for an air carrier must follow the carrier's "program and applicable sections of its maintenance manual." Repair stations that provide such work stated that the term "applicable sections" causes confusion because it is subjective and vague. They point out that air carriers, air operators, and even the FAA's own inspectors interpret this term differently.

In this NPRM, the FAA proposes language to clarify that when a repair station performs work as a maintenance provider to an air carrier, the repair station must perform that work in accordance with the maintenance instructions provided by the air carrier or air operator.

Line maintenance will be authorized as a limitation to an airframe rating. The regulations regarding line maintenance authorization will be deleted.

## **II. Discussion of the Proposed Regulatory Requirements**

### **1. Transition**

The FAA recognizes that the proposals in this NPRM represent a major revision to part 145. There would be many new and enhanced requirements as well as an in-depth change to the ratings system. These changes would require the revision of several existing repair station documents. These document changes would have to be reviewed and

accepted by the FAA. This could then lead to delays in granting repair stations the approvals they need to operate.

To provide for the transition of current repair stations and at the same time accommodate the continued receipt of new applications, the FAA is proposing to retain the current regulations appended with the proposed regulations for 24 months. The current language would be retained with its current subpart lettering, A through E, and be revised only where necessary to accommodate the transition. The new rule would be located in new subparts, lettered F through J. Thus, the current Subpart B Certification § 145.51, Application for Certificate, would co-exist with a Subpart G Certification § 145.1051, Application for Certificate, during the 24-month transition period. The FAA anticipates that the final rule, if adopted, would become effective 60 days after publication.

Repair stations certificated before the effective date of the final rule would be able to continue to operate under the current regulations. They would have 24 months after the effective date of the final rule to show compliance with the proposed regulations by developing associated documents and submitting an FAA Form 8310-3, Application for Repair Station Certificate and/or Rating.

New applicants would be required to comply with subparts F through J upon the effective date of the final rule. Any repair station applying for a change to its repair station certificate requiring a new application, as provided for in the current rule, would be required to comply with subparts F through J as a condition of approval of the certificate change.

All repair stations certificated before the effective date of the final rule would have to timely apply for certification under the proposed rules if they intend to continue to

operate without interruption. Repair stations are cautioned that waiting until later in the 24-month transition period may increase the risk that unforeseen circumstances might result in the repair station not having an active certificate until such time as the FAA can review the submitted documents and provide the repair station with a new repair station certificate.

All certificated repair stations would have to be in compliance with the provisions of subparts F through J no later than 24 months after the effective date of the rule. At that time, current subparts A through E would be removed and reserved. The rules would continue to carry the 1xxx (one thousand series) numbers to be consistent with any guidance or other documentation that is issued during the 24-month transition period.

To address the transition in the current regulations, the FAA proposes to revise subparts A through C as follows:

- Section 145.1(a) would state that subparts A through E will expire and be reserved 24 months after the effective date of the final rule.
- Section 145.1(b) would be changed to direct that subparts A through E apply to repair stations certificated before the effective date of the final rule until they are certificated under new subparts F through J or 24 months from the effective date of the rule.
- Section 145.1(c) would be revised to direct that a repair station certificated before the effective date of the rule would have to follow subparts A through E until it complies with subparts F through J.
- Section 145.51(a) would be changed to direct applications to be made in accordance with new § 145.1051.

- Section 145.53(a) would be revised to reflect that a certificate issued under subparts A through E would be valid for no longer than 24 months after the effective date of the final rule.

- Section 145.55(a) would be revised to state that a certificate issued to a repair station located outside the United States would not be valid 24 months after the effective date of the final rule.

- Section 145.55(b) would be revised to state that a certificate issued to a repair station located outside the United States may be renewed but not beyond 24 months from the effective date of the final rule.

- In § 145.55(c)(1), the reference to § 145.51 for the application procedures would be changed to § 145.1051.

- In § 145.57, the reference to § 145.51 for the procedures to be followed by a new owner would be changed to § 145.1051.

- In § 145.105(b), the reference to § 145.103 for change in housing would be changed to § 145.1103.

## **2. System of Ratings**

The FAA proposes to revise the ratings and classes that may be issued to certificated repair stations. Under this proposal, the system of ratings would be reduced from eight ratings to five ratings. The ratings definitions would be revised to clearly indicate the type of work that a repair station is authorized to perform under each rating.

### **a. Airframe Rating (current § 145.59(a)/proposed § 145.1059(a))**

Currently, the FAA may issue a repair station an Airframe rating with any of four class ratings: Classes 1, 2, 3, and 4. These classes are based on aircraft weight (large or small (as defined in 14 CFR § 1.1)) and construction (composite or all-metal).

The use of construction as a basis for determining the class rating system no longer reflects the technology used in building today's aircraft. For example, at the time the Airframe rating was created, the aviation industry commonly referred to aircraft made from a combination of wood, fabric, and metal materials as aircraft with a "composite" construction. Today, the term "composite" construction refers to the use of carbon-carbon compounds and advanced polymers (which is fast becoming the standard in the industry). These types of materials were not even envisioned when the Airframe rating was created.

In addition, airframe manufacturers often use a mix of materials in current aircraft construction. An all-composite or all-metal construction of an airframe is no longer the standard design. For example, an airframe could be metal while certain portions, such as control surfaces and fairings, are composite materials.

The continued use of weight as a basis for determining the class rating is also problematic. Historically, the FAA and the aviation industry used the weight classification of small and large aircraft to distinguish aircraft used in commercial air carrier service from those used in general aviation. Commercial operators typically used aircraft weighing over 12,500 pounds, while general aviation operators typically used smaller aircraft. This distinction also reflected the relative complexity of the aircraft. Today, however, aircraft weight reflects neither the complexity nor the intended use of an aircraft.

Therefore, it is clear that the Airframe rating needs to be updated. The FAA initially considered trying to define the term "composite." This was difficult, at best.



More importantly, any definition developed today may soon become outdated by further technological advances. The FAA has determined that a better approach is to have the underlying certification rules dictate the appropriate rating.

The FAA proposes to remove classes from the Airframe rating and group the aircraft that were previously covered by these classes in accordance with their certification standards under parts 23, 25, 27, and 29. All other aircraft not certificated under these parts would be in a separate category “all other aircraft.”

The FAA believes that grouping the Airframe rating into categories according to the airworthiness certification standards would better define the technology of the aircraft and relieve confusion. The proposed structure of the Airframe rating is:

- Category 1: All aircraft certificated under parts 23 and 27.
- Category 2: All aircraft certificated under parts 25 and 29.
- Category 3: All other aircraft.

The purpose of grouping airframes into categories 1 and 2 is to include aircraft that were originally certificated under their respective airworthiness standards. The third category would capture aircraft that were originally certificated under Civil Aeronautical Rules (CARs), Civil Aeronautical Bulletins (CABs) and/or Special Aeronautical Information Bulletins (SAIBs). This system of airframe rating categories would also capture future aircraft designs.

Category 3 would capture aircraft that are not included in categories 1 and 2. This would include aircraft such as unmanned aircraft systems, light sport aircraft, and manned balloons. This would also provide a category for other aircraft currently under design status and not yet certified under established certification regulations.

An application for the proposed Airframe rating would have to include a list of the make, model, or series of all aircraft that the repair station intends to maintain. This is a marked change for current airframe class rated repair stations.

The FAA also proposes to use the term “category” as a replacement for the term “class.” The term “class” has been used for so many years to mean a particular group of aircraft in part 145 that it seems impractical to try to apply it in a different context.

**b. Powerplant Rating (current § 145.59(b)/proposed § 145.1059(b))**

The current Powerplant rating has three classes: Class 1 - Reciprocating engines of 400 horsepower or less, Class 2 - Reciprocating engines of more than 400 horsepower, and Class 3 - Turbine engines.

When the FAA established the current Powerplant rating, reciprocating radial engines that produced more than 400 horsepower powered nearly all large aircraft. These engines differed substantially from the horizontally-opposed reciprocating engines with less than 400 horsepower that manufacturers used to power general aviation aircraft. In 1941 (which was when the repair station ratings were originally developed), horsepower evaluations were the most common of the methods available to determine the complexity of engines.

Today, this methodology is antiquated and adds no value to the Powerplant rating. It is possible for small horizontally-opposed reciprocating engines to produce more than 400 horsepower. Further, most modern transport category aircraft now have turbine engines, while manufacturers no longer produce high horsepower radial engines. This is the exact opposite of what was in place when the FAA established the current Powerplant

rating (i.e., manufacturers were just beginning to use turbine engines on civil aircraft).

Therefore, separate classes for reciprocating engines are no longer useful.

Under the proposed Powerplant rating, the FAA intends to establish four categories:

- Category 1: Reciprocating engine.
- Category 2: Turbine engine.
- Category 3: Auxiliary Power Units (APU).
- Category 4: All other powerplants.

Reciprocating engines would be grouped into one category regardless of the horsepower generated. Turbine engines would continue to be grouped into one category. Since reciprocating and turbine engines do not cross technological boundaries, the FAA believes the two categories sufficiently capture the types of engine work that a repair station may perform.

A new category for APUs is proposed because they have evolved into a specialized technology in the powerplant arena. An APU refers to any gas turbine-powered unit delivering rotating shaft power or compressed air, or both, that is not intended for propelling aircraft. APUs often drive aircraft generators and air-conditioning packs. APUs also can be used as an extra source of energy to start the primary aircraft engines. The design configurations of some aircraft rely on an APU for provisional back-up electrical power in flight if the primary power sources fail.

The fourth category, All other powerplants, would be created to allow growth within the Powerplant rating for any other powerplant units not commonly used in aircraft today, such as solely electric engines.

Under the proposed rating system, a repair station holding a new Powerplant rating could perform maintenance, preventive maintenance, and alterations of the powerplant and associated articles that are necessary for the powerplant to operate properly.

An application for the proposed Powerplant rating would have to include a list of the make, model, or series of all aircraft engines and APUs that the repair station intends to maintain. This is a marked change for current powerplant class rated repair stations.

As was the case with the proposed Airframe rating, the FAA is proposing to use the term “category” as a replacement for the term “class.”

**c. Propeller Rating (current § 145.59(c)/proposed § 145.1059(c))**

Under the current regulations, the Propeller rating has two classes. Class 1 covers fixed-pitch and ground-adjustable propellers of wood, metal, or composite construction. All other propellers, by make, fall under Class 2.

This distinction is based on the different levels of complexity between a propeller with no moving parts and a propeller with a mechanical system that controls the pitch of the propeller while operating. Aircraft with small reciprocating engines generally have fixed-pitch propellers, while aircraft with high horsepower engines have variable-pitch propellers. Although varying levels of complexity exist for propellers, most repair stations performing maintenance on propellers hold both class ratings.

As was the case with the current Airframe rating, the use of a propeller’s composition as a basis to classify propellers has lost its usefulness.

The proposed Propeller rating would be structured to categorize propellers by complexity of designs and would no longer refer to the composition of a propeller as a method of categorization. The proposed structure of the Propeller rating is:

- Category 1: Fixed-pitch and ground-adjustable propellers.
- Category 2: Variable-pitch propellers.
- Category 3: All other propellers.

The proposed Propeller rating would permit a repair station to perform maintenance, preventive maintenance, and alterations on propellers and their respective individual component parts that are necessary for the propellers to operate. Examples of these propeller component parts would be propeller blade pitch controls, governors, pitch change assemblies, pitch locks, mechanical stops, and feathering system components. The proposed Propeller rating does not include main and auxiliary rotors (Airframe rating required) or rotating airfoils of aircraft engines (Powerplant rating required).

An application for the proposed Propeller rating would have to include a list of the make, model, or series of all propellers that the repair station intends to maintain.

As was the case with the proposed Airframe and Powerplant ratings, the FAA is proposing to use the term “category” as a replacement for the term “class.”

**d. Component Rating (proposed § 145.1059(d))**

The current Radio rating (§ 145.59(d)) consists of three classes: Class 1 - Communication equipment, Class 2 - Navigation equipment, and Class 3 - Radar equipment. In its report, ARAC indicated that technological advances in avionics have led to much controversy over this categorization of equipment. ARAC noted that modern avionics equipment typically integrates communication and navigation functions into a single avionics appliance. Radar and radio equipment that operate using pulse technology also serve communication and navigation functions. As such, repair stations performing work on avionics equipment often hold a Radio rating with all three of the classes.

The current Instrument rating (§ 145.59(e)) consists of four classes: Class 1 - Mechanical, Class 2 - Electrical, Class 3 - Gyroscopic, and Class 4 - Electronic. These classes were established based on the technology available at the time. However, most instruments currently operate using a combination of these technologies. These class distinctions are no longer appropriate.

The current Accessory rating (current § 145.59(f)) has three classes. Class 1 is mechanical accessories that depend on friction, hydraulics, mechanical linkage, or pneumatic pressure for operation. Class 2 is electrical accessories that depend on electrical energy for their operation and generators. Class 3 is electronic accessories that depend on the use of an electron tube, transistor, or similar device. Similar to the Instrument rating, the classes for the Accessory rating identify the article's principle of operation. Many articles maintained under this rating use a combination of principles, thus requiring repair stations to hold all the class ratings for an Accessory rating.

The classes defined in §§ 145.59(d), (e), and (f) are essentially the same as when they were implemented in 1941. The technological advances in radios, instruments, and accessories have often combined many of the functions and modernized the construction of the articles detailed in these classes. Under the current rule, repair stations may not be able to categorize properly the articles on which they desire to perform maintenance. Therefore, repair stations may be required to possess tools and equipment that are either antiquated or not available.

The FAA is proposing a new Component rating to replace the Radio, Instrument, and Accessory ratings. The proposed Component rating would allow repair stations to perform maintenance, preventive maintenance, and alterations on various components and

related articles that are not installed on an airframe, powerplant, or propeller. The various components and articles that are currently included in a Radio, Instrument, or Accessory class rating would be absorbed into the Component rating. A repair station with a Component rating would be required to have an Airframe, Powerplant, or Propeller rating with limitations to install components or appliances. The FAA believes that the comments generated in previous rulemaking attempts are being addressed by this proposed rating. The Component rating would open opportunities for repair stations to have numerous components listed on their operations specifications, thus generating more work and revenue.

An application for the proposed Component rating would have to include a list of the components that the repair station intends to maintain.

**e. Specialized Service Rating (proposed § 145.1059(e))**

The FAA is proposing a new rating, called Specialized Service, to address what is currently listed as specialized services functions of a limited rating. This rating would be different from the other ratings in that it focuses on the maintenance being performed rather than the article being maintained. A repair station with a Specialized Service rating could perform a specialized maintenance function that might apply across multiple other ratings.

The proposed Specialized Service rating is substantially the same as the existing limited rating for specialized services in § 145.61. The Specialized Service rating would allow a repair station to perform a specific and unique function associated with the maintenance, preventive maintenance, or alteration of an article. The repair station's operations specifications would list the Specialized Service rating and the specification used in performing that specialized service. The specification could be a military, industry,

or applicant-developed specification that was approved by the FAA. Examples of specialized services would include, but not be limited to, non-destructive testing or inspection, welding, heat-treating, plating, and plasma spraying.

If specialized service functions are contained within a repair station's existing ratings, the repair station would not require an additional rating to perform that service. For example, if an Airframe rated repair station has the in-house capability to perform x-ray inspections in accordance with the airframe Instructions for Continued Airworthiness, it would not need to have a Specialized Service rating to perform that function on an airframe for which it is already rated.

As is the case with the current limited specialized service rating, this rating could enhance the capabilities of some repair stations that are limited by the article-based rating they possess. This individual rating would allow a repair station to perform the maintenance function outside of its article-based rating—to specialize in a particular maintenance function without being required to hold an Airframe, Powerplant, Propeller, or Component rating to perform the service.

An application for the proposed Specialized Service rating would have to include a list of the services, with associated specifications, that the repair station intends to provide.

**f. Limitations to Ratings (current § 145.61/proposed § 145.1061)**

Section 145.61 provides for limited ratings based on a repair station performing maintenance, preventive maintenance, or alterations on a particular make or model of aircraft, powerplant, propeller, radio, instrument, accessory, or part thereof, and for performing specialized maintenance.



The FAA is proposing that limited ratings no longer be issued. Proposed § 145.1061 would more accurately detail the FAA's current practice of issuing limitations to the rating of a certificated repair station. For example, if a repair station intends to perform only interior configuration work or aircraft painting, the FAA would issue the repair station a limitation to its Airframe rating and list that limitation on the repair station's operations specifications. The repair station's operations specifications would specify the rating to which the limitation applies in sufficient detail to describe the maintenance capabilities of the repair station.

The FAA believes that the ability to place limitations when necessary on a repair station's rating is essential to accurately reflect the repair station's capabilities. Currently, a repair station's operations specifications contain provisions for this purpose. This proposed change would add regulatory language to control what has historically been an essential part of the rating system.

### **3. Certification Requirements**

Several areas within subpart B (Certification) of part 145 have, over time, caused confusion in the industry and within the FAA. Changes within this subpart are needed to clarify existing regulatory language and, in some cases, create regulatory language where essential practices have long been imposed through FAA guidance. Changes are also needed in this subpart to align language with other proposed section changes contained in this NPRM. In addition, this NPRM contains a proposal to allow for certification denial when certain enforcement history exists.

#### **a. Application for Certificate – Items Required (current § 145.51(a)/proposed § 145.1051(a))**

Current § 145.51(a) details, and § 145.1051(a) proposes to detail, those items that must be included in an application for a repair station certificate and rating.

The FAA proposes to add a provision that would require an initial applicant for a repair station certificate to provide the FAA with a letter outlining how the applicant will comply with each section of part 145 (see proposed § 145.1051(a)). The FAA refers to this as a “letter of compliance.” Under longstanding FAA policy and practice, applicants have provided this letter in the past. Since this letter has long been an essential part of the application process, the FAA believes it appropriate to propose a regulatory basis for it. Also, because applicants have been providing these letters by policy, the FAA believes no additional cost would be incurred.

Current § 145.51(a)(1) requires that an application for a repair station certificate include a repair station manual acceptable to the FAA as required by current § 145.207, and § 145.51(a)(2) requires that the application include a quality control manual acceptable to the FAA as required by current § 145.211(c). These requirements are found in proposed §§ 145.1051(a)(2) and (a)(3), respectively. The FAA is also proposing in § 145.1051(a)(3) that the repair station manual and the quality control manual may be contained in the same document if they are clearly identified.

Currently, an applicant is required to provide a list by type, make, or model of each article for which the application is made (§ 145.51(a)(3)). This requirement is not explicitly linked to the rating system found in § 145.59. The FAA proposes to revise this requirement (in proposed § 145.1051(a)(4)) to specifically reference the rating system (as found in proposed § 145.1059). This would help the applicant better understand the certification requirements and align the information provided at the time of application

with the actual ratings allowed through the regulation. The FAA does not anticipate that this change would burden current repair stations, and it would ensure that applicants submit the necessary information without adding new requirements.

As repair stations have become larger and more complex, it is apparent that identification of the principal repair station location has often become difficult to ascertain for the public as well as for the FAA. This has made it difficult for the FAA to fulfill its obligation to provide appropriate oversight. Current § 145.51(a)(5) requires an applicant to provide a description of its housing and facilities, in accordance with § 145.103. The FAA is proposing clarifying language in § 145.1051(a)(6) that would require the applicant to identify all facilities that will make up the repair station at the time of application.

The FAA is not proposing changes to the requirements in current §§ 145.51(a)(4), (6) and (7). However, in proposed subpart G, these requirements would be found in proposed as §§ 145.1051(a)(5), (7) and (8) respectively.

**b. Application for Certificate – Appropriate Equipment (current § 145.51(b)/proposed § 145.1051(b))**

Current § 145.51(b) requires that the equipment, personnel, technical data, and housing and facilities required for the certificate and rating, or for an additional rating, must be in place for inspection at the time of certification or rating approval by the FAA. This section also states that an applicant may meet the equipment requirement if it has a contract acceptable to the FAA with another person to make the equipment available to the applicant at the time of certification and at any time it is necessary when the relevant work is being performed by the repair station.

This provision was included for the first time in the 2001 final rule in response to comments received on the 1999 NPRM. The commenters expressed concerns that the requirement to have all the equipment in place at the time of certification would be unnecessarily burdensome. Others noted that it is important only that the equipment be in place when it is needed to perform the work. Similarly, commenters opposed the requirement in then proposed § 145.111 (Equipment and material requirements) that would have required repair stations to have, located on the premises and under their full control, the equipment and material necessary to perform the maintenance appropriate to their ratings. They said the requirement would preclude repair stations from renting or leasing equipment. The commenters also noted that a renting or leasing option would be particularly important for expensive, rarely used tools.

In response to those comments, the FAA revised the text in § 145.51(b) to permit an applicant for a repair station certificate to meet the equipment requirement by having a contract acceptable to the FAA that would ensure the equipment would be available when the relevant work is performed. Agreeing with the commenters' concerns over the burden of having to purchase expensive, rarely used tools to have in place during initial certification, the FAA stated that its new contract provision "will accommodate those repair stations that do not plan to purchase expensive equipment that may not be used regularly" (66 FR 41095, August 6, 2001). The preamble discussion, however, noted that the provision did not relieve an applicant from having the equipment in place and available for inspection at the time of certification. While recognizing that, under this provision, an applicant need not physically retain the equipment after certification, the FAA found it necessary that each applicant have the equipment in place during the certification process.

During the certification inspection, the FAA could “observe the placement of the equipment, whether the equipment works, and whether the applicant can use the equipment properly.” *Id.*

Similarly, in response to the comments on proposed § 145.111, the FAA revised the text (now found in § 145.109) to provide that: “The equipment, tools, and material must be located on the premises and under the repair station’s control when the work is being done.” This change also accommodated the commenters’ concerns about not having to purchase expensive, seldom used equipment to have permanently in place when they could instead obtain it through contract when needed.

These issues were discussed in the 2006 NPRM, when the FAA addressed and attempted to clarify what it termed was an ambiguity in the existing text. The preamble stated that this “ambiguity results from the phrase specifying that the equipment requirement could be met ‘if the applicant has a contract acceptable to the FAA with another person to make the equipment available to the applicant at the time of certification’” (71 FR 70256, Dec. 1, 2006 (emphasis in original)).

The FAA noted the possibility of inconsistent application of this provision by different FAA inspectors. For example, one inspector might require all of the equipment to be placed on site for initial inspection, and another might only review the contract. Noting that the safety basis for the equipment requirement is that the equipment be in place when the work is being performed, the FAA proposed revised text in the 2006 NPRM to clarify that the requirement for initial certification could be met by a contract to make the equipment, tools, and test apparatus available to the repair station at any time it is necessary when the relevant work is being performed.

The FAA has reconsidered this issue and has determined that the “clarification” proposed in the 2006 NPRM was not entirely consistent with the underlying purpose of the provision published in the 2001 final rule. As noted above, the 2001 preamble supported the change to allow contracting for equipment availability by noting that it would “accommodate those repair stations that do not plan to purchase expensive equipment that may not be used regularly.” The preamble also made clear that the new provision did not relieve an applicant from having the equipment in place and available for inspection at the time of certification. Thus, the clarification offered in the 2006 NPRM was not in full accord with the agency’s intent set forth in the 2001 preamble, which would have required applicants to have basic equipment in place for inspection.

The FAA believes it should not grant a repair station certificate to an applicant with a virtually empty building based merely on a showing it can get the required equipment by contract when needed. Therefore, the FAA proposes to change the rule to remove any ambiguity by requiring the repair station to meet the equipment requirements of proposed § 145.1051 by having the equipment available for inspection at certification. The repair station would not need to own the equipment but would be required to present the equipment during certification and have it available thereafter.

The FAA also proposes to clarify the scope of the kinds of items a repair station must have for initially obtaining certification by adding both tools and test apparatus to the list of items a repair station must have on site. While the term “equipment” could be interpreted to include many examples of each, adding the term “tools” to the regulation would ensure that an applicant for a repair station certificate also have on site certain tools necessary for the rating sought that individual mechanics or repairmen might not possess.

This might include tools that are of a specialized nature for the rating or other tools that might be too large or expensive, or of a limited specialized nature. For the same reasons, and for consistency with the requirements of § 43.13(a), the FAA proposes to add “test apparatus” to the list of items a repair station must have in place for inspection at the time of initial certification or rating approval.

**c. Application for Certificate – Repair stations outside the United States (current § 145.51(c)/proposed § 145.1051(c))**

Current § 145.51(c) requires an applicant for a certificate for a repair station located outside the United States to show the certificate and/or rating is necessary for maintaining or altering certain aircraft and articles. The result of this language unintentionally requires the repair station applicant to maintain both aircraft and articles. The FAA proposes to change the word “and” to the less restrictive “or” in proposed § 145.1051(c).

**d. Application for Certificate – Denial (proposed § 145.1051(e))**

The 2006 NPRM proposed that the FAA could deny an application for a repair station certificate if the applicant previously held a repair station certificate that had been revoked or if the applicant or certain key individuals who would exercise control over the new repair station had materially contributed to the circumstances that resulted in a prior repair station certificate revocation action. This is similar to the current authority contained in part 119 authorizing the FAA to deny applications for air carrier and commercial operator certificates. The commenters who opposed this proposal stated it was too open-ended and that it would be impossible to maintain a tracking list of disqualifying individuals.

At the present time, the FAA is not planning to maintain a tracking list of individuals who might be disqualified under this section. The agency is, however, planning to add a question to the repair station application inquiring into the disqualifying criteria set forth in this section, e.g., whether the applicant held a repair station certificate that had been revoked or that is in the process of being revoked. A truthful answer here would be imperative in view of proposed § 145.1012, because an intentionally false answer to the question could result in the suspension or revocation of any FAA-issued certificate held by that applicant.

While the FAA understands the concerns of the commenters, the agency believes this requirement should be implemented to address safety concerns. For example, a chief inspector from a repair station that lost its certificate for serious maintenance-related safety violations applied for and received a new repair station certificate. That individual also became the chief inspector at the newly certificated repair station. While under the chief inspector's direction, employees of the newly certificated station performed improper maintenance on a number of propellers, one of which came apart in flight causing a fatal accident.<sup>8</sup>

The FAA already has such a mechanism in place for air carriers and commercial operators. Section 119.39(b) allows the FAA to deny an application for a part 121 or 135 air carrier certificate or operating certificate based on prior relevant enforcement action. The FAA can deny certification to an applicant who is substantially owned by (or intends to fill a management position with) an individual who had a similar interest in a certificate

---

<sup>8</sup> As a result of this incident, the NTSB, in a safety recommendation dated February 9, 2004 (A-04-01 and A-04-02), expressed concern that the FAA did not have a mechanism for preventing individuals who were associated with a previously revoked repair station from continuing to operate through a new repair station.



holder whose certificate was (or is being) revoked when that individual materially contributed to the circumstances causing the revocation process.

The FAA proposes new language (in § 145.1051(e)) to detail conditions under which a person may be denied a repair station certificate. The changes the FAA propose are based to a large extent on the language contained in § 119.39(b). The FAA's proposal would authorize the agency to deny a repair station application if:

- The applicant previously held a repair station certificate that was revoked.
- The applicant intends to fill or fills a management position with an individual who exercised control over or who held the same or a similar position with a certificate holder whose repair station certificate was revoked, or is in the process of being revoked. That individual must have materially contributed to the circumstances causing the revocation or causing the revocation process.
- An individual who would hold a management position previously held a management position with a certificate holder whose repair station certificate was revoked, or is in the process of being revoked. The individual must have materially contributed to the circumstances causing the revocation or causing the revocation process.
- An individual who would have control over or substantial ownership interest in the applicant had the same or similar control or interest in a certificate holder whose repair station certificate was revoked, or is in the process of being revoked. That individual must have materially contributed to the circumstances causing the revocation or causing the revocation process.

The current regulations (§ 145.55(a)) contemplate the holder of a repair station certificate voluntarily surrendering the certificate to the FAA, in which case it would cease

to be effective. This voluntary surrender provision is sometimes abused in an attempt to thwart an ongoing investigation. The FAA is aware that sometimes after an enforcement investigation has commenced, the certificate holder will attempt to surrender the certificate as a means of stopping the enforcement action. It is the FAA's policy, however, not to accept the voluntary surrender of a certificate in those circumstances. The FAA's Compliance and Enforcement Program (FAA Order 2150.3B at Ch 5, Para. 10(b)) instructs FAA investigative personnel to refuse the voluntary surrender of a certificate if it appears the surrender is being attempted to avoid a certificate action. In those cases, the investigative personnel are to continue with the investigation and recommend enforcement action, if appropriate. As discussed in paragraph f (Duration and Renewal of Certificate (current § 145.55/proposed § 145.1055)) below, the FAA is proposing to amend the text currently in § 145.55 to add a new condition to the certificate surrender provision—that acceptance for cancellation by the FAA of a certificate offered for surrender is necessary to render the certificate no longer effective. This change would highlight and provide additional notice to the holders of repair station certificates of the FAA's policy against potential violators merely surrendering their certificates to avoid enforcement action. Unless the FAA accepted the certificate for surrender, it would remain effective for administrative and enforcement purposes, even if the certificate holder ceased operations. Accordingly, in the event of an enforcement action that might result in the suspension or revocation of a repair station certificate, the enforcement process could continue and, in the case of a revocation, a record would exist to support the certificate denial provisions proposed in this paragraph.

The FAA recognizes that the proposed language does not contain an appeal or reconsideration procedure. This is because a process already exists in current § 13.20, which addresses, among other things, orders of denial. Paragraph (b) of that section provides, in pertinent part, that unless an emergency exists requiring the immediate issuance of an order of denial, the affected person (the applicant) must be provided with notice prior to issuance of an order of denial. Paragraph (c) further provides that, within 30 days after service of the notice, the affected person may reply in writing or request a hearing in accordance with subpart D of part 13. Subpart D of part 13 provides the Rules of Practice for FAA Hearings. Thus, applicants who are denied a repair station certificate would be provided with appropriate due process through the means of an evidentiary hearing.

**e. Issue of Certificate (current § 145.53/proposed § 145.1053)**

Current § 145.53(a) states that, subject to three exceptions, a person who meets the requirements of part 145 is entitled to a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interest of safety. Since proposed § 145.1051 would provide a mechanism for the FAA to deny a certificate, an applicant would no longer be “entitled” to a certificate.

The FAA is proposing in § 145.1053(a) that an applicant could be found “eligible to be issued” a certificate. This proposed change is consistent with other certification requirements, such as in parts 121 and 135, where the FAA has the authority to deny a certificate. In addition, the FAA proposes to remove the three exceptions from this paragraph as they refer to additional requirements for particular applicants, not exceptions to the eligibility requirements.

Section 145.53(b) sets forth the procedure to certify repair stations located in a country with which the United States has a bilateral aviation safety agreement. This procedure is based on the certification from the civil aviation authority of the country that the applicant meets the requirements of part 145.

The FAA must consider that the United States may enter into a bilateral agreement with a civil aviation authority other than a national aviation authority. This situation already exists in Europe. The European Union formed the European Aviation Safety Agency (EASA) to carry out those civil aviation safety functions that were previously the domain of national aviation authorities.

Therefore, the FAA is proposing in § 145.1053(b) to allow the FAA to certify a repair station outside the U.S. based on a certification from an authority acceptable to the FAA. This change would allow the FAA to make the finding based on a recommendation from a national aviation authority, EASA, or any other EASA-like entity that may be created in the future.

**f. Duration and Renewal of Certificate (current § 145.55/proposed § 145.1055)**

As discussed in paragraph d (Application for Certificate – Denial (proposed § 145.1051(e)) above, the FAA has experienced instances in which a certificate holder surrendered its certificate to the FAA in order to stop an investigation that the holder suspected would lead to an FAA order suspending or revoking the certificate because of known or suspected serious violations of the regulations. In the case of a repair station, the holder of a repair station certificate could attempt to take advantage of the provision in current § 145.55, regarding surrender of the certificate. Upon surrender the certificate would no longer be effective, and there would be no certificate that could be suspended or

revoked. This is an abuse of the surrender provision, as it was never intended as a device to stop an investigation and possible enforcement proceeding. In proposed § 145.1055, the FAA would add a new condition to rendering a surrendered certificate ineffective. Under the proposal, a surrendered certificate would remain effective unless the FAA accepted it for cancellation.

As the discussion in paragraph d points out, the FAA's Compliance and Enforcement Program (FAA Order 2150.3B at Ch 5, Para. 10(b)) instructs FAA investigative personnel to refuse the voluntary surrender of a certificate if it appears the surrender is an attempt to avoid a certificate action. The amendment proposed here would provide additional notice to all holders of repair station certificates that successfully surrendering a repair station certificate for cancellation requires not only the offer of surrender, but also the FAA's acceptance of that offer. As we noted above, unless and until the FAA accepts for cancellation a surrendered certificate, the certificate would remain effective for administrative and enforcement purposes, even if the holder ceased operations.

Current § 145.55(c) sets forth what a certificated repair station located outside the United States must provide to renew its certificate. In addition to the items listed in that provision, a certificated repair station located outside the United States must pay a fee for service as a condition for renewal. The requirement to pay this fee as part of the renewal application is not in § 145.55(c) even though it is a requirement found in 14 CFR part 187. The FAA is proposing in § 145.1055(c)(3) that, as a condition of renewal, the fee prescribed by the FAA has been paid.

**g. Capability List (current § 145.215/proposed § 145.1215)**

During the repair station certification process, an applicant's ratings are established following a demonstration to the FAA that the applicant is capable of performing maintenance on specific articles. Following certification, the FAA expects that a repair station continues to manage and control its capabilities on each individual article it maintains. This is accomplished by the repair station ensuring that it has, for example, trained personnel, and the necessary data, facilities, and equipment.

Under the current Limited rating, a repair station is required to document each article it maintains on either a capability list, or on the repair station's operations specifications. For Class ratings, the FAA assumes that a repair station, using its own methods, manages its capabilities with the same level of detail (although this is not required). Under this Class rating system, what an individual repair station is actually capable of maintaining is for the most part known only to the repair station and the individual FAA principal inspector(s) assigned to manage that repair station's certificate.

The FAA believes it is critical that both a repair station and the FAA are able to identify the actual certified capabilities of that repair station at any given time. It is important that the actual capabilities of a repair station are documented and that the documentation is current. The 2006 NPRM was not clear as to how the articles should be listed on the capability list. The FAA is proposing to define what is required on the capability list by adding two terms. The first, "series as applicable," would recognize that not all models have series. The second, "basic part number," would be added to clarify that it is not necessary to list each model or part "dash number." The requirements for identifying articles on the capabilities list would provide clarity, consistency, and flexibility.

If the repair station chooses to use a capability list, the proposed rule would require that it identify each airframe, powerplant, or propeller by manufacturer, model, and series as applicable. For a component rating, the proposed rule would require that the list identify each component for which the repair station is rated by manufacturer, manufacturer-designated nomenclature, and basic part number.

Currently, it is required that this level of documentation exists for each repair station with a Limited rating. The documentation is either on a capability list or listed on the repair station's operations specifications. For all ratings under the current rule, including Class ratings, a repair station must ensure that it has the housing, facilities, equipment, material, technical data, and trained personnel in place prior to performing maintenance on an article. To make this determination today, a repair station must be aware of the manufacturer, model, series, nomenclature, and basic part number, for example, of each article it wishes to maintain. Otherwise, the repair station would not know what data to obtain, what subjects to train personnel in, and what equipment to purchase.

The current practice of issuing Class ratings was found to have limitations and unforeseen consequences that were not apparent until the advent of new technology components and aircraft. Class ratings entitled repair stations to work on articles neither they nor the FAA ever envisioned would exist at the time the rating was issued. That the repair station would limit itself from working on certain articles for which it was not fully capable essentially provided, in effect, a limited Class rating. This proposed rule would eliminate Class ratings and require the "writing down" of this identifying information in a standard format for all repair stations. From this perspective, the FAA believes the burden

on the industry would be an administrative one, in particular for those currently holding a class rating. However, the burden should be, for the most part, limited to the onetime transfer of the capability list to a standard format acceptable to the FAA. The FAA requests specific comments, observations, and suggestions regarding the elimination of class ratings.

To ease this burden and to standardize the method used to document capabilities, the FAA may develop a web-based capability list. The FAA believes that an FAA-hosted automated capability list, if created, should have a positive impact on FAA staff and resources. Currently, a certificated repair station with a Limited rating has the option to list the articles for which it is rated on a capabilities list, and to expand that list through a self-evaluation process. Under this proposed rule, all repair stations could proceed in one of two ways to add an article to their capabilities list. First, a repair station could submit a request to the FAA for approval. The request would have to document that the repair station is capable of performing the requested work—it would have to demonstrate that it has the technical data, housing, facilities, equipment, material, processes, and trained personnel to perform the work on the article for which it seeks approval. Second, either during the repair station's initial application process, or later through an amendment to its operations specifications in accordance with proposed § 145.1058, the repair station could seek a general authorization in its operations specifications to perform a self-evaluation each time it wishes to add an article to its capabilities list. Similar to the criteria used in the individual request to the FAA method discussed in option one, the self-evaluation would be done to determine that the repair station has the technical data, housing, facilities, equipment, material, processes, and trained personnel to perform the work on the article it



wishes to add to its capabilities list. If the self-evaluation determines that those criteria are met, the repair station could add the article without specific FAA approval.

The FAA considers the capabilities list self-evaluation process to be similar in concept to the self-evaluation process expected under the current Class ratings system. Both processes allow for a repair station to add to its capabilities list independent from FAA review. It is not the FAA's intent to reduce this flexibility with this proposed rule. However, under the current rule, Class ratings should not be authorized unless the repair station can prove the capability to maintain a representative number of products under the rating. Unlike the Class rating which considers a repair station's ability to maintain a range of product models, the proposed capability list self-evaluation authorization would take into account the adequacy of a repair station's quality control system to control the expansion of its capabilities independent from FAA review. A risk-assessment process would be used by the FAA to evaluate a new repair station applicant's ability to manage a self-evaluation program. Existing repair stations using a capability list and those with Class ratings could be authorized to perform self-evaluations for future capability changes and would not be required to reapply for this authorization. During the 24 months of the transition period, there would be no requirement for existing repair stations to perform self-evaluations on their current capabilities beyond what is contained in their current procedures.

Proposed § 145.1215(f) would require each repair station with a capability list to review its capabilities at least every two years, and to remove any article from the list that it is no longer capable of maintaining. The FAA believes this is a necessary quality element

to ensure a repair station's capability list continually reflects its actual repair station capabilities.

**h. Contract Maintenance (current § 145.217/proposed § 145.1217)**

The FAA placed this section, Contract Maintenance, under the discussion of the proposed certification requirements because a repair station's contracting capability must be understood and evaluated during the certification of the repair station.

With the exception of a new paragraph (b)(4), and an expansion of the restrictions in paragraph (c), the proposed changes in this section are made to clarify the intent of the current rule. As in the current rule, proposed §145.1217(a) allows a repair station to contract a "maintenance function" to an outside source provided certain conditions are met. Much confusion exists around the term "maintenance function" and when FAA approval is required when a repair station contracts such a function to an outside source.

The FAA does not approve who a certificated repair station contracts with. While this information must be maintained and made available to the FAA, each repair station is free to choose with whom it contracts. However, the rule currently requires, and this proposed rule would continue to require, that the FAA approve the maintenance function to be contracted. The basis of this requirement extends back to the original certification of the repair station. When an applicant applies for a rating, the applicant must declare what functions within the rating the repair station will contract out.

For example, an applicant for a Component rating to overhaul a specific fuel pump model may not be capable of rewinding armatures and may plan to contract this function out. Although the Component rating is a blanket authorization to overhaul the pump, the applicant has formally declared what functions within the rating it will contract out—in

this case, armature rewinding. Another example would be an applicant for an Airframe rating who does not plan on developing capabilities for component overhaul and repair. The function contracted out would be component overhaul and repair. Proposed §§ 145.1217(a)(1) and 145.1209(e)(5) would continue to require the certificated repair station to maintain this contracted function information for the duration of the repair station certificate.

The overriding intent of current § 145.217(a)(1), and proposed § 145.1217(a)(1) is not for the FAA to restrict the ability of a repair station to contract out maintenance, but rather to ensure the repair station's capabilities are clearly stated at all times. Nevertheless, as currently provided in § 145.217(c) and in proposed § 145.1217(c), the FAA will not approve the contracting out of all maintenance functions encompassed in the repair station's rating. Such a practice would effectively render the part 145 certificate meaningless.

Clarification is needed as to what is not contract maintenance. Part 145 does not regulate the "brokering" of a complete article by a repair station. If a repair station is not exercising the privilege of its certificate, it is not contracting a maintenance function as covered by the proposed rule. A repair station can, as can any other certificated or noncertificated person, receive, ship, arrange for maintenance, or act as agent in the brokering of maintenance for others without being considered to be contracting maintenance. When a repair station exercises the privilege of its certificate by engaging in maintenance for which it is rated, and then initiates the involvement of another person in that maintenance, the repair station is engaging in contract maintenance.

For example, if a repair station with an Airframe rating removes an engine and ships the engine to a repair station with a Powerplant rating, it is not engaging in contract maintenance because it is not rated to perform powerplant maintenance. However, if during inspection it discovers a damaged engine mount, and subsequently sends the engine mount to another repair station or noncertificated facility for a weld repair and approves the work for return to service, it would be contracting maintenance under the repair station rating (see proposed § 145.1217). The repair station is contracting maintenance because, under its rating, it is authorized to do the work and approved it for return to service. Therefore, the repair station is exercising the privilege of its certificate in performing maintenance and it is rated for the weld repair by virtue of its Airframe rating.

Throughout § 145.217, the terms “outside source”, “outside facility”, and “facility” are used interchangeably. These terms are undefined and subject to inconsistent usage and confusion. For consistency and to eliminate confusion, the FAA proposes to replace these undefined terms in proposed § 145.1217 with the term “person,” which is defined in § 1.1.

The FAA is proposing in § 145.1217(b)(1) to add a reference to the quality control system procedures proposed in § 145.1211(c)(1)(vi) to emphasize that the quality control system of each noncertificated person with whom a repair station contracts a maintenance function must be equivalent to its own. The contracting repair station must physically observe the quality control system of each noncertificated person with whom it wishes to contract and determine that it meets this standard before any maintenance is performed by that person.

The FAA is also proposing a new provision (§ 145.1217(b)(4)) to the contracting rule to emphasize specifically that the personnel requirements set forth in proposed

§145.1151(c) apply when maintenance is contracted to a noncertificated person. Current §145.151(c) provides that each repair station must ensure that it has a sufficient number of qualified employees to ensure all work is performed in accordance with part 43. While it is implicit in that rule that those personnel requirements apply when work is contracted to noncertificated persons (because the contracting repair station is responsible for determining the airworthiness of articles before approving them for return to service), the FAA is proposing for clarity to add a phrase in proposed § 145.1151(c) specifically referring to work contracted to a noncertificated person.

To adequately perform the surveillance and verification requirements of § 145.1217(b), a certificated repair station would need a sufficient number of employees with the training or knowledge and experience in the maintenance function performed by the noncertificated person. This is necessary to assess the noncertificated person's ability to correctly perform the work and the proper completion of the work. In contracting a maintenance function to a noncertificated person, a repair station is not absolved from having corporate technical knowledge of the work performed under its rating. If it is not able to ensure such knowledge base in its employees, a repair station must be limited from, and broker the maintenance function to, a person appropriately certificated to perform and approve the work for return to service.

#### **4. Repair Stations Providing Maintenance for Air Carriers (current § 145.205/proposed § 145.1205)**

Current § 145.205 contains, and proposed § 145.1205 would contain, the regulations covering maintenance, preventive maintenance, and alterations performed for

certificate holders under parts 121, 125, and 135, and for foreign air carriers or foreign persons operating U.S.-registered aircraft in common carriage under part 129.

**a. “Applicable Sections” of a Maintenance Manual (current § 145.205(a)/proposed § 145.1205(a))**

Currently, § 145.205(a) states that a repair station working for an air carrier or a commercial operator that has a continuous airworthiness maintenance program under part 121 or part 135 must follow the carrier’s or commercial operator’s program and “applicable sections of its maintenance manual.” Before the 2001 final rule, § 145.2 specified the additional requirements for repair stations performing maintenance work for air carriers or commercial operators under the continuous airworthiness requirements of parts 121 and 127 and for airplanes under the inspection program required by part 125. The FAA believed that parts of the regulation were difficult to follow because, for example, it required repair stations to comply with identified subparts, *e.g.*, “subpart L of part 121” (except for certain specified sections). In an attempt at clarity, in the 1999 NPRM the FAA proposed reversing that logic and, in proposed § 145.7, instead of listing the exceptions, the proposed rule identified the specific sections that, “as applicable,” would apply (*e.g.*, “Each certificated repair station. . .must, as applicable, comply with . . .” the specified sections as listed.). That proposal also generated adverse comments. The references to the various specified sections in parts 121 and 135 “as applicable” continued to confuse some commenters, some of whom also incorrectly inferred that the FAA intended to impose additional requirements by listing specific sections of the rule.

Based on these comments, the specific section references were not included in the 2001 final rule. These air carrier maintenance provisions are currently found in § 145.205

and, generally speaking, require repair stations to follow the air carrier's or operator's program and "applicable sections of its maintenance manual." Repair stations that provide this type of work have stated that the term "applicable sections" causes confusion because it is subjective and vague. They point out that air carriers, air operators, and the FAA's inspectors interpret the term differently. Commenters to the 2006 NPRM voiced similar concerns for similar reasons with the change proposed there. Specifically, we proposed that repair stations must comply with "the applicable parts of this chapter and follow the air carrier or commercial operator's program and applicable sections of its maintenance manual." The confusion expressed by the commenters carries a common theme, all involving the reference to "applicable sections" or "as applicable."

In proposed § 145.1205(a), we are attempting to clarify this issue by stating that when a repair station performs work as a maintenance provider for an air carrier or commercial operator, the repair station must perform that work in accordance with the instructions provided by that air carrier or air operator.

**b. Certificate holders operating under 14 CFR 125 (current § 145.205(b)/proposed § 145.1205(b))**

In proposed § 145.1205(b), the FAA would change the language currently in § 145.205(b) to include all operators that may have an approved aircraft inspection program. Currently, § 145.205(b) references only FAA-approved inspection programs for part 125 operators. However, some persons operating under part 135 may also have an FAA-approved inspection program and others may have selected an inspection program under § 91.409(e). Therefore, references to part 135 and § 91.409(e) would be included in proposed § 145.1205(b).

**c. Foreign persons operating under 14 CFR 129 (current § 145.205(c))**

If a reference to a foreign air carrier or foreign person operating a U.S.-registered aircraft under part 129 is added to proposed § 145.1205(a), it is no longer necessary to include a provision similar to § 145.205(c) in proposed § 145.1205. Each of these part 129 operators must have an FAA-approved maintenance program that must be followed by persons performing maintenance on these aircraft.

**d. Line Maintenance (current § 145.205(d))**

The 1999 NPRM introduced the concept of line maintenance for repair stations. As proposed, line maintenance was intended to allow repair stations currently located at an air carrier's line station to perform simple scheduled servicing and unscheduled maintenance that could be performed safely without the need to house the aircraft. This was intended to provide relief from the requirements of § 145.103(b), which requires a repair station with an airframe rating to have the ability to house the largest aircraft for which it is rated. This maintenance would not necessarily require housing the entire aircraft.

For reasons unstated, the 2001 final rule did not include a requirement that line maintenance be limited to those repair stations located at air carrier line stations. In addition, it introduced the concept that a repair station could perform line maintenance upon authorization by the FAA. It also included a definition of line maintenance (in § 145.3) that included "any unscheduled maintenance resulting from unforeseen events." These additions imply that a repair station may perform 'any unscheduled maintenance' without meeting the prerequisites of part 145 for an appropriate rating, simply based on the issuance of an 'authorization' to perform 'line maintenance' for an air carrier or commercial operator.



Line maintenance was not intended to be a rating. Rather, it was meant to be an authorization for an appropriately rated repair station. The § 145.103(b) housing requirement applies to a repair station holding an Airframe rating. Section 145.205(d) is an authorization providing relief from that requirement under limited circumstances.

However, as applied, line maintenance authorization has been granted to repair stations without the appropriate ratings or facilities because the existing language implies that it is permissible. This was a concern expressed in comments in response to the introduction of the line maintenance authorization in 2001. In addition, the line maintenance concept has also resulted in repair stations that were created simply to perform line maintenance at many geographically disparate locations, which makes it almost impossible for the FAA to reasonably perform its safety oversight function.

To rectify this situation, the FAA is proposing to eliminate the current line maintenance concept by not including a provision similar to § 145.205(d) in proposed § 145.1205.

However, the performance of maintenance that could include line maintenance would still be an available option for a repair station. A repair station could be issued a limitation to an Airframe rating to identify and limit the work the repair station could perform. This could include line maintenance. With appropriate limitations, line maintenance is simply one example of work for which a limitation to an Airframe rating could be issued. With a limitation of line maintenance for a specified air carrier or commercial operator, the repair station would be permitted to perform maintenance limited to line maintenance, but there would be no authorization for line maintenance beyond the limitation to the rating.

If the line maintenance work is to be accomplished temporarily away from the repair station, this could be accommodated under the provisions of § 145.1203 (Work Performed at Another Location). If the location is in the United States and intended to be permanent, and is within the geographical boundaries of the local FAA Certificate Holding District Office, an additional fixed facility of the repair station as provided by proposed § 145.1103(d) may be appropriate. If the location is not within the geographical boundaries of the Certificate Holding District Office, certification of a separate repair station or satellite repair station under proposed § 145.1107 may be appropriate. This would reintroduce the original intent that this type of work would be limited to currently certificated repair stations at such locations where the work is needed.

The current definition of line maintenance does not correctly describe the scope of this level of maintenance. Therefore the FAA is also proposing to revise the definition of line maintenance in proposed § 145.1003(e). The definition would now reinforce that line maintenance is performed for air carriers, is generally performed at the ramp, parking area or gate, and typically will not exceed 24 continuous hours per aircraft.

## **5. Other Proposed Changes**

### **a. Applicability (proposed § 145.1001)**

A new applicability statement is necessary to address the transition period. This language would direct applicants to subparts F through J for the regulations that would apply to them. This new section would continue to state that a repair station certificate is issued for the performance of maintenance, preventive maintenance, and alterations on civil products to which part 43 applies. The FAA cannot compel a person to hold a repair station certificate, so the phrase in current § 145.1 *or is required to hold* would be deleted

as unnecessary. The FAA proposes instead that the rules would apply to any person who holds out as an FAA-certificated repair station.

**b. Avionics (proposed § 145.1003(c))**

Aviation electronic technology has advanced dramatically since the advent of the current ratings system. Because of these advancements, the ARAC recommended the addition of an avionics rating. The FAA proposed such a rating in the 2006 NPRM. The commenters generally opposed a separate avionics rating. Most of these commenters stated that avionics are components and should simply be identified as such. Moreover, other commenters stated that confusion would exist if avionics were made a separate category of component.

To recognize advances in the field of aviation electronics and to reduce any confusion that exists regarding the differences and overlaps in the terms instruments, electronics, electrical systems, and avionics, the FAA is proposing to add a definition for the term “Avionics” in proposed § 145.1003(c). Under this definition, “Avionics” (i.e., aviation electronics) would be any component generally associated with processing digital electronic signals. Examples of such components include radios and navigation equipment, radar, and data processors.

**c. Repair Station Records: Falsification, reproduction, or alteration (proposed §§ 145.12 and 145.1012)**

At present, part 145 does not contain a general prohibition against making fraudulent or intentionally false entries in repair station records or for making fraudulent reproduction or alteration of records or reports. Other parts of the regulations do contain similar proscriptions. For example, part 43 contains such prohibitions for maintenance

records or reports, with a consequence of suspension or revocation of the applicable airman, operator, or production certificate and other specified privileges (see § 43.12.). Other regulations contain similar prohibitions (e.g., intentionally false entries on applications and other records, and cheating on tests) with similar consequences (i.e., suspension or revocation of FAA-issued certificates or ratings (see. e.g., §§ 61.37, 61.59, 63.18, 63.20, 65.18, 65.20, and 67.403.)). While § 43.12 provides for suspension or revocation of the applicable airman and other mentioned certificates and privileges for requisite maintenance record falsifications or fraudulent acts, it does not provide for repair station certificate suspension or revocation for the same kind of conduct.

Therefore, the FAA is proposing a new § 145.12 in subpart A, and a new § 145.1012 in subpart F, that would be similar to § 43.12. Under 49 U.S.C. 44701, the FAA is charged with promoting aviation safety. The importance of accurate records and reports cannot be overstated. In view of the FAA's limited resources, "the agency, and ultimately the flying public, depend heavily on the integrity of the system of self-reports." Twomey v. National Transp. Safety Bd., 821 F.2d 63, 68 (1<sup>st</sup> Cir. 1987). Because of the importance of honest and trustworthy records and reports to aviation safety, the FAA believes that any person who makes or causes to be made an intentionally false or fraudulent entry in any record or report the agency needs to provide proper oversight of repair stations should be subject to enforcement action as noted above. Accordingly, the agency is proposing suspension or revocation of not only the repair station certificate, but any certificate, approval, or authorization issued by the FAA and held by that person.

**d. Amendment to or Transfer of Certificate (current § 145.57/proposed § 145.1056)**

Although the one thousand series numbers (1xxx) in proposed subparts F through J generally have the same one hundred series number (xxx) for each corresponding regulation section in the current rule (subparts A through E), the FAA is proposing to deviate from this scheme for this section in order to accommodate two new proposed sections on operations specifications. Therefore, the proposed new section on “Amendment to or transfer of certificate” would be numbered § 145.1056, whereas the current section is numbered § 145.57. The proposed section captioned “Operations specifications” would be numbered § 145.1057. Also, as written, current § 145.57 contains confusing language that implies a repair station must apply for a change to its certificate without reason. The proposed section would change the confusing language and add a time limitation for submitting an application for a certificate amendment, change in location, or transfer of certificate.

**e. Operations specifications (proposed § 145.1057)**

Currently, part 145, Repair Stations, introduces the requirement for operations specifications in § 145.5, Certificate and operations specification requirements. Unlike other operating rules requiring operation specifications, part 145 does not explain what operation specifications are or what they must contain. Also unlike part 119, which clearly states in § 119.7 that with limited exceptions operations specifications are not a part of the certificate, some operators and FAA personnel assume repair station operations specifications are an extension of the repair station certificate, while others do not. The FAA is proposing to specify how long operations specifications are valid, what they must contain, and where they must be located. The FAA would also clarify that except for those

operation specifications detailing ratings and limitations, repair station operations specifications are not a part of the repair station certificate.

**f. Amending operations specifications (proposed § 145.1058)**

The proposed clarification of operations specifications in proposed § 145.1057, specifying that operations specifications are not a part of a certificate, would allow the FAA to make administrative changes to operations specifications other than ratings or limitations (e.g., definitions or formatting) without having to resort to certificate action, when appropriate notice is given to the repair station. This section would provide procedures to be followed by both the FAA and repair stations for initiating changes to the operations specifications. Additionally, procedures would be provided for affected repair stations to petition for reconsideration of adverse decisions by the FAA, both in emergency and non-emergency situations.

**g. Housing and Facilities (current § 145.103/proposed § 145.1103)**

The FAA is proposing to amend the rules for housing and facilities to require that the housing for the facilities, equipment, materials, and personnel be both suitable and permanent. The agency is also proposing to provide an exception to the requirement that a repair station with an airframe rating must be able to enclose the largest type and model of aircraft on its operations specifications to facilitate those with a limitation to the airframe rating such that the entire aircraft would not need to be housed to provide appropriate environmental protection. As stated previously, this exception would facilitate repair stations with a limitation to perform line maintenance for air carriers. Finally, in addition to some minor clarifications, the FAA is proposing to allow a repair station to use multiple fixed locations if appropriate criteria are met.

**i. Exception to Housing Requirement**

Under current § 145.103(b), a certificated repair station with an Airframe rating must provide suitable permanent housing to enclose the largest type and model of aircraft listed on its operations specifications without consideration of the limits of the work being performed. Even if the work is limited to a certain part, portion, or section of the aircraft, a repair station must be able to house the entire aircraft if it has an Airframe rating.

To retain the level of safety established by certification of a repair station under part 145, but to lessen the impact to those repair stations performing line maintenance or other maintenance not normally associated with a requirement to have housing to enclose the entire aircraft, the FAA is proposing, in § 145.1103(b), to provide relief from the housing requirement of § 145.103(b). The proposed change would allow a repair station with an Airframe rating and appropriate limitations to that rating to perform the limited airframe maintenance without having housing to enclose the entire aircraft. If, as determined by the FAA, the repair station provides adequate environmental protection for the work being performed under the limitation to its rating, it would not be required to house the complete aircraft.

This is consistent with the housing exception for line maintenance found in § 145.205(d). The proposed rule permits an evaluation of the housing requirements based on limitations to the Airframe rating. This would allow for the certification of a repair station with an Airframe rating, limited to the performance of maintenance such as simple daily scheduled checks or some work limited to aircraft interiors, to not have housing to enclose the entire aircraft. Repair stations currently performing work under a line maintenance authorization could be provided appropriate housing relief by this proposed

section if they otherwise meet the requirements of part 145. This change would provide clarity and some relief in not requiring that the entire airframe be enclosed if the FAA determines the repair station provides adequate environmental protection for the work being performed. This option would be available only for repair stations with an Airframe rating with limitations. If a repair station has an Airframe rating with no limitations or limitations allowing work on substantially an entire airframe, it would be required to have suitable permanent housing to enclose the largest aircraft for which it is rated.

**ii. Permanent Location**

Paragraph (a)(1) of § 145.103 requires each certificated repair station to provide housing for the facilities, equipment, materials, and personnel consistent with its ratings. It has long been FAA policy that a repair station must have a permanent fixed location from which to operate. There have been occasions where the housing used to obtain certification was either relinquished by the certificate holder to the facility owner, or further sub-leased for other purposes rendering the repair station essentially unable to perform the maintenance for which it was certificated. The FAA believes it is necessary to reinforce the need for repair stations to provide assurance that work is performed adequately and to the manufacturer's standards. This means protection of workers from unfavorable environmental conditions so that their performance and the airworthiness of the articles they are maintaining are not adversely affected. Repair stations would be required to provide suitable and permanent housing to protect the articles being maintained from contamination, foreign object debris, or conditions that may promote corrosion or other deteriorating conditions.



Therefore, the FAA proposes to revise this section to require “suitable permanent” housing. A requirement for permanent housing refers not only to the construction of the facility, but also to the fact that the certificate holder must have sole operational control at all times of the housing it uses to obtain certification, either by ownership or by contract. The FAA understands that repair stations may share the same hangar or building, and this would still be allowed under this proposal. However, these repair stations may not share the same space in that hangar or building and each repair station must have full control of its space at all times. In addition, it must be clearly defined as to what space is under the control or contract of each repair station and this space must be clearly defined in each repair station’s manual as required in proposed § 145.1209(b).

**iii. Multiple Fixed Locations**

The FAA is also proposing to add a new § 145.1103(d) to allow a repair station to use multiple fixed locations in performing maintenance, preventive maintenance, and alterations under its repair station certificate. Additional fixed locations are not recognized in the current rule. This has led to inconsistent or non-authorization of the use of additional permanent locations. Repair stations often find it necessary to use locations other than the primary facility for environmental reasons (such as noise abatement for an engine overhaul shop doing test runs). In recognition of this need, additional fixed locations could be authorized if:

- The repair station applies for and receives approval of additional fixed locations.
- The location is within the geographic boundaries of the certificate holding district office.

- The location is permanently affixed and is under the managerial control and authority of the repair station certificate.
- The maintenance functions performed at the additional fixed locations are in support of and within the scope of the ratings listed on the repair station operations specifications.

If a fixed location were located outside of the geographic boundary of the FAA office with oversight responsibilities, the additional fixed location either would have to be certificated as a satellite repair station and meet the requirements of proposed § 145.1107, or it would require its own repair station certificate under the provisions of proposed § 145.1051 and § 145.1053.

#### **iv. Additional Proposed Changes**

The FAA is also proposing, in § 145.1103(a)(2), to delete the reference to specialized services currently found in § 145.103(a)(2). When used in conjunction with maintenance, preventive maintenance, and alterations, the reference to specialized services is redundant because complete maintenance of an article includes all necessary services. Finally, the FAA is also proposing to include protection of articles in § 145.1103(a)(2)(iv). Currently, a repair station's facility is required to include sufficient space to segregate articles and materials stocked for installation from those undergoing maintenance or alterations. The FAA is proposing to change "segregate articles..." in current § 145.103(a)(2)(iv) to "segregate and protect articles...." in § 145.1103(a)(2)(iv) to be consistent with the intent not only to segregate but also to protect articles as stated in current § 145.103(a)(2)(i) and in proposed § 145.1103(a)(2)(i) "for the proper segregation and protection of articles during all maintenance, preventive maintenance, or alterations."

It is inconsistent to require articles to be protected during maintenance but not require them to be protected in storage prior to being used in maintenance.

To ensure that the housing and other environmental protections continue in force, the FAA is proposing to change the phrase in the first line of § 145.103(a) from “repair station must provide-...” to “repair station must provide and maintain- ...” in proposed § 145.1103(a).

Finally, a grammatical error currently exists in § 145.103(a)(2)(ii) that the FAA would correct in proposed § 145.1103(a)(2)(ii) by adding the word “of” near the end of the sentence so that it reads “alteration of articles ....”

**h. Satellite Repair Stations (current § 145.107/proposed § 145.1107)**

In proposed § 145.1107(a), the FAA proposes to remove the current restriction in § 145.107(a)(1) that a satellite repair station may not hold a rating not held by the certificated repair station with managerial control. The FAA believes that the agency should not impose these restrictions on satellite repair stations.

Additionally, the FAA proposes to require that an applicant for a satellite repair station submit the same repair station and quality control system manuals as the repair station with managerial control (proposed § 145.1107(a)(2)). The satellite repair station would have to identify any specific processes or procedures unique to the satellite repair station in appendices or sections of the manuals.

The other new paragraphs proposed in § 145.1107(a) would require a satellite repair station to:

- Submit the same training program as the repair station with managerial control, with processes or procedures unique to the satellite or managerial repair station identified (proposed paragraph (a)(3)).
- Demonstrate compliance with its manual and any additional manual sections applicable to the satellite (proposed paragraph (a)(4)).
- Meet the housing and facility requirements of proposed § 145.1103 since it is a separately certificated repair station (proposed paragraph (a)(5)).
- Have its own facility in a location with a physical address other than the repair station with managerial control (proposed paragraph (a)(6)).

Finally, the requirement currently in § 145.107(a)(2) that the satellite repair station meet the requirements for each rating it holds would be retained in proposed § 145.1107(a)(1).

**i. General (current § 145.101/proposed § 145.1101)**

The FAA proposes to add tools and test apparatus to the items that a repair station must provide under proposed § 145.1101. Tools and test apparatus are added for consistency with the maintenance performance requirements of § 43.13(a).

The FAA also proposes to add the word “any” to near the end of the sentence so that it reads “any rating the repair station holds.”

**j. Equipment, Materials, and Data Requirements (current § 145.109/proposed 145.1109)**

The FAA is proposing to add test apparatus and data to the list of items that a repair station would have to have on the premises and under its control when it is performing work requiring its use. This would remove potential uncertainty surrounding whether a

necessary piece of test apparatus or data was considered to be “equipment,” “tools,” or neither. In addition, including test apparatus would be consistent with the requirements in § 43.13(a). Accordingly, the FAA is proposing to revise the section heading to include test apparatus.

The FAA is also proposing to include an element of the relief provided in current § 145.51(b) pertaining to meeting the equipment requirement by having a contract with another person to make the equipment available when the work it requires is being performed (see proposed § 145.1109(b)). The issue of whether all the equipment must be on site for initial inspection was discussed above in the context of the agency’s proposing to delete the contract provision from the initial certification requirements in proposed § 145.1051(b). Although the agency believes it is important during initial certification to observe all the necessary equipment, tools, and apparatus for its placement on site and to evaluate an applicant’s ability to use it, the FAA agrees with previous commenters who voiced concerns about not having to purchase expensive, seldom used equipment and to have it permanently in place when they could instead obtain it through contract when needed.

The relief proposed in § 145.1109(b) would allow a repair station to meet the equipment, tools, and test apparatus requirement of proposed § 145.1109(a) for specialized and rarely used equipment, tools, and test apparatus if the repair station demonstrates to the FAA that it has made arrangements with another person to make those items available when their use is required. All equipment must be in place during the demonstration and inspection phase of certification.

Currently, § 145.109(d) lists certain documents that repair stations must keep that are necessary for performing maintenance, preventive maintenance, or alterations. It requires that the documents be “current and accessible when the relevant work is being done.” A strict reading of the requirement that these documents be current has created unnecessary compliance and enforcement issues. A recent FAA legal interpretation clarified that “current” in this context means “up to date,” i.e. the most recent version (revision) of the document (e.g. maintenance manual) issued by the manufacturer. This is a paperwork requirement only, as the same interpretation made clear that if a maintenance provider used a prior version/revision of a manual in performing maintenance, there would be no violation of the maintenance performance rules unless the FAA could show that the data used was no longer acceptable. This is so because of the flexibility provided in the maintenance regulations. For example, the performance standards set forth in § 43.13(a) provides that the person performing maintenance shall use the current manufacturer’s maintenance manual or Instructions for Continued Airworthiness [ICA], “or other methods, techniques, and practices acceptable to the Administrator....”

Enforcement issues have arisen because some inspectors have concluded that the requirement to have a document be “current and accessible” when work is being done means that the most up-to-the-minute manual revision be incorporated into the repair station’s system even though such immediate incorporation may not be realistic. This can be due to a number of real-world constraints, (e.g., mail delays, revision publishing and distribution logistics, and export constraints pertaining to technical data).

The housekeeping means for assuring appropriate compliance is contemplated in the current rule through the repair station’s quality control system. Currently, § 145.211(a)

requires that each repair station establish and maintain a quality control system acceptable to the FAA that ensures the airworthiness of the articles being maintained. Section 145.211(c) provides that, as part of a repair station's acceptable quality control system, the repair station must keep current a quality control manual in a format acceptable to the FAA, and specifies what that manual must include. Section 145.211(c)(1)(v) provides specifically that the manual include a description of the procedures used for "[e]stablishing and maintaining current technical data for maintaining articles."

In developing acceptable procedures for assuring the currency of the technical data, repair stations typically work with their local Certificate Holding District Offices (CHDOs) to tailor procedures that consider realistic time constraints to incorporate manual revisions and other changes/updates into their systems. So long as a repair station and its CHDO have established and agreed to realistic procedures for establishing and maintaining current data, it would be anomalous for an inspector to threaten enforcement action citing § 145.109(d) because a manufacturer had issued a revision that the repair station had not reasonably, in following its FAA-accepted quality control system, incorporated into its manual system.

In view of these considerations, and the fact that proposed § 145.1109(a) would require repair stations to have the technical data, etc., to perform their maintenance in accordance with part 43, a specific list of documents such as that found in current § 145.109(d) would be redundant and possibly limiting. Therefore, because proposed § 145.1109(a) requires the technical data, equipment, tools, test apparatus, and materials required by part 43, we are deleting subparagraph § 145.109(d) since it is inclusive in subparagraph § 145.1109(a).

**k. Supervisory Personnel Requirements (current § 145.153/proposed § 145.1153)**

Section 145.153(a) requires supervisors to oversee the work performed by any individuals who are unfamiliar with the methods, techniques, practices, aids, equipment, and tools used to perform maintenance. The FAA is proposing to simplify this requirement to specify that supervisors must be present to oversee the work being performed by the repair station (see proposed § 145.1153(a)).

Section 145.153(b)(1) requires each supervisor employed by a repair station located inside the United States to be certificated under part 65. Supervisors may supervise only as allowed by the privileges of the certificate held as provided in part 65. For example, a supervisor certificated with only a Powerplant rating may not supervise personnel doing airframe maintenance, as the Powerplant rating does not provide that privilege.

The FAA is proposing in § 145.1153(b)(1) to revise this requirement to state that the supervisor be appropriately certificated under part 65 for the work being supervised. Prior to the 2001 rule change, the language was clear in § 145.39(d): “Each person who is directly in charge of the maintenance functions of a repair station must be appropriately certificated under part 65...”. The omission of “appropriately” in 2001 was an oversight that the FAA will correct by reinserting “appropriately certificated under part 65” where such certification under part 65 is required. The appropriateness of the certificate is based in the privilege of the mechanic or repairman certificate issued under part 65 subpart D or E. For example, a supervisor who holds a mechanic certificate with airframe and powerplant ratings issued under part 65 would not be appropriately certificated to supervise work on instruments. A supervisor would need to hold a repairman certificate to supervise work on instruments. Currently, § 145.153(b)(2) contains a different set of qualifications



for a supervisor employed by a repair station located outside the United States. For example, a supervisor in a foreign repair station is not required to be appropriately certificated under part 65. To eliminate these two dissimilar standards, the FAA is proposing two alternative paths for supervisor qualification in a repair station located outside the United States. The first would require the supervisor to have the appropriate certification under part 65; the second would require the supervisor to meet the repairman eligibility requirements of § 65.101(a)(1)(2)(3) and (5) (see proposed § 145.1153(b)(2)(i) and (ii)).

Finally, § 145.153(c) requires repair stations to ensure that each supervisor understands, reads, and writes English. The FAA is proposing in § 145.1153(c) that these supervisors also be able to speak English. This would help to confirm that supervisors read and understand English.

**l. Inspection Personnel Requirements (current § 145.155/proposed § 145.1155)**

Section 145.155 sets forth the experience requirements for inspection personnel. Currently, this section requires only that inspectors be able to understand, read, and write English. The FAA is proposing to add a requirement to proposed § 145.1155(b) that inspectors be able to speak English as well. As stated above, the FAA believes this would help to confirm that these inspection personnel read and understand English.

Section 145.155(a)(2) currently has the word “and” at the end of the section. This is an error as there is no § 145.155(a)(3). This error would not be carried over to proposed § 145.1155(a)(2) as the subsequent proposed § 145.1155(b) stands alone.

**m. Personnel Authorized to Approve an Article for Return to Service (current § 145.157/proposed § 145.1157)**

Section 145.157 sets forth the experience requirements for the person authorized to approve an article for return to service. Section 145.157(a) requires each person authorized to approve an article for return to service employed by a repair station located inside the United States to be certificated under part 65. For the reasons discussed above under proposed § 145.1153, the FAA is proposing in § 145.1157(b) that each person authorized to approve an article for return to service be appropriately certificated under part 65. The appropriateness of the certificate is based in the privilege of the mechanic or repairman certificate issued under part 65 subpart D or E.

Currently, § 145.157(b) contains a different set of qualifications for a person authorized to approve an article for return to service employed by a repair station located outside the United States. To harmonize these two dissimilar standards as much as possible, the FAA is proposing in § 145.1157(c) to require those persons employed by a repair station located outside the United States to meet either the certificate requirements of proposed § 145.1157(a) or the eligibility requirements of § 65.101(a)(1), (2), (3) and (5).

Section 145.157(c) requires that a repair station ensure that each person authorized to approve an article for return to service understands, reads, and writes English. For the reasons discussed above, the FAA is proposing in § 145.1157(d) that these persons also be able to speak English.

Finally, the FAA believes the requirements in current § 145.157 are set forth in a cumbersome manner. Therefore, the FAA is proposing to rearrange these requirements in proposed § 145.1157.

**n. Records of Management, Supervisory, and Inspection Personnel (current § 145.161/proposed § 145.1161)**

Section 145.161 sets forth the management, supervisory, and inspection personnel records that a repair station must maintain and make available to the FAA.

Section 145.161(a)(3) requires each repair station to maintain a roster of personnel authorized to sign a maintenance release for approving a maintained or altered article for return to service. To be consistent with the use of the term approval for return to service in §§ 43.5 and 43.7, and to eliminate confusion arising from the use of “maintenance release for approving an article,” the FAA is proposing to change this requirement to a roster of personnel authorized to approve for return to service a maintained or altered article (see proposed § 145.1161(a)(3)).

Section 145.161(a)(4) requires each repair station to maintain a summary of specified information on the employees listed in the rosters required by §§ 145.161(a)(1) through (a)(3). Section 145.161(a)(4)(iii) requires this summary to include past relevant employment with names of employers and periods of employment. The FAA is proposing in § 145.1161(a)(4)(iii) to require that past positions and types of maintenance performed be included in this format. This would confirm the relevancy of the listed past employment.

**o. Training Requirements (current § 145.163/proposed § 145.1163)**

Section 145.163 contains the requirements for a repair station’s employee training program. The FAA is proposing in § 145.1163(a) to delete the implementation date requirements of § 145.163(a) as this is no longer applicable.

The FAA is also proposing that the training program requirements in § 145.163(b) be revised in proposed § 145.1163(b). Currently, the training program must ensure that each employee assigned to perform maintenance, preventive maintenance, or alterations,

and inspection functions is capable of performing the assigned task. The FAA believes that the current requirement is too broad and lacks specific elements. Training in human factors, federal regulations, and repair station manuals, procedures, and forms are minimum subject areas that should be covered in all training programs submitted for approval. Therefore, the FAA is proposing in § 145.1163(b) to require that the training program ensure that employees who perform maintenance, preventive maintenance, and alterations be (1) capable of performing the assigned task, (2) trained in human factors relevant to aviation maintenance, (3) trained in the Federal Aviation Regulations as they relate to Part 145, and (4) trained in the repair station's manuals, procedures, and forms.

The FAA is also proposing clarifying changes to § 145.163(d) in proposed § 145.1163(d) resulting in the removal of a repetitive "to its".

**p. Hazardous Materials Training (current § 145.165/proposed § 145.1165)**

Section 145.165 sets forth the requirements for a repair station's employee hazardous materials training program.

Section 145.165(b) sets forth the job functions that an employee may not perform or directly supervise without having received appropriate hazardous materials training. Over the years, the FAA has found that the phrase "may not" has not been interpreted as a complete prohibition of the action to which it is linked. To correct this ambiguity, the FAA is proposing in § 145.1165(b) to change the phrase "may not" to "shall not."

**q. Privileges and Limitations of Certificate (current § 145.201/proposed § 145.1201)**

Section 145.201 sets forth the privileges and limitations associated with a repair station certificate.

Section 145.201(a)(2) allows a repair station to arrange with another person to perform the work for which the repair station is rated. It also contains certain requirements if that person is not certificated under part 145. The FAA is proposing in § 145.1201 to clarify that if a repair station arranges for another person to perform work for the repair station it must comply with proposed § 145.1217 (Contract Maintenance). This would clarify the authority of the repair station to contract maintenance to another person and the responsibility it has if it chooses to do so.

The current limitation in § 145.201(b) providing that a repair station may not maintain or alter any article for which it is not rated has caused confusion concerning the responsibilities of repair stations and their oversight by the FAA. Part 145 contains the rules repair stations must follow when working on articles to which part 43 applies, yet § 145.201(b) is drafted broadly and would seem to prohibit work on articles not governed by part 43. Rather than proposing an amendment that would explain in the text of the paragraph that the prohibition applies only to articles governed by part 43, the FAA proposes to clarify the issue by combining the text currently in §§ 145.201(b) and (c) into proposed § 145.1201(b). This would provide a single list of when a repair station may not approve an article for return to service.

**r. Repair Station Manual (current § 145.207/proposed § 145.1207)**

Section 145.207 contains the requirement for a repair station manual and sets forth a repair station's obligations for making its manual accessible to its personnel and providing current copies to its FAA district office, while Section 145.211 contains the requirement for a quality control manual. For readability and to eliminate repetition, the FAA is proposing in § 145.1207 to address similar requirements for each manual in a

combined introductory section. The FAA will also simplify the listing of manual requirements by removing the repeated preliminary term “A certificated repair station must...” currently in each paragraph of § 145.207. The FAA also proposes to add an introductory statement “A certificated repair station must:”. To recognize the combined introduction, section 145.1207 is titled Repair Station and Quality Control Manuals.

**s. Repair Station Manual Contents (current § 145.209/proposed § 145.1209)**

The content requirements for a repair station’s manual are currently located in § 145.209. Of the 11 listed paragraphs, seven require listing procedures and three require descriptions. The FAA is proposing to consolidate and re-sequence the requirements in § 145.209(b), (c) and (d) and include updated references in proposed § 145.1209. This consolidation would eliminate repetitive terms (“Procedures for” and “A description of”), reduce the number of paragraphs from eleven to five, and require a resequencing.

The FAA is also proposing to revise the text currently in § 145.209(d)(1) in proposed § 145.1209(d)(1) to add procedural requirements to the repair station manual for FAA approval of capability list changes when self-evaluation is not authorized. Proposed § 145.1209(d)(2) would also be revised to include what would be expected of a repair station when performing a self-evaluation.

Finally, the FAA is proposing to add a requirement in § 145.1209(d)(2)(iv) that repair stations retain documentation of the self-evaluation for two years.

**t. Quality Control System (current § 145.211/proposed § 145.1211)**

This section would remain essentially unchanged, with the exception of adding requirements for suspected unapproved parts and ensuring maintenance not completed as a result of shift change or similar interruption is properly completed.

**u. Inspection of Maintenance, Preventive Maintenance, or Alterations (current § 145.213/proposed § 145.1213)**

Section 145.213(d) states that only an employee certificated under part 65 is authorized to sign off on final inspections and maintenance releases for the repair stations. The FAA is proposing to remove this paragraph in proposed § 145.1213 as it is repetitive and conflicts with the requirements of proposed § 145.1157. The FAA is also proposing to remove the term “maintenance release” from proposed § 145.1213 to be consistent with part 43.

**v. Recordkeeping (current § 145.219/proposed § 145.1219)**

Section 145.219 sets forth the recordkeeping requirements for a repair station. Section 145.219(b) requires a repair station to provide a copy of the maintenance release to the owner or operator of the article on which the work was performed. To be consistent with § 43.5 (Approval for return to service after maintenance, preventive maintenance, rebuilding, or alteration) and § 43.7 (Persons authorized to approve aircraft, airframes, aircraft engines, propellers, appliances, or component parts for return to service after maintenance, preventive maintenance, rebuilding, or alteration), the FAA is proposing in § 145.1219 to replace the term “maintenance release” with “approval for return to service.”

**w. Consistency Changes in Parts 43 and 91**

Based on the above proposals, we are also proposing changes to the following sections in parts 43 and 91: Appendix B of part 43, § 91.171, § 91.319, § 91.327, § 91.411, § 91.413, and Appendix A to Part 91. These sections/appendices currently reference some element of a repair station’s operations that would be changed based on the proposals in

this document. As such, these sections/appendices would need to be modified to be consistent with such proposals.

### **III. Regulatory Evaluation, Regulatory Flexibility Determination, International Trade Impact Assessment, and Unfunded Mandates Assessment**

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 and Executive Order 13563 direct that each Federal agency shall propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (Public Law 96-354) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (Public Law 96-39) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and, where appropriate, that they be the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation with the base year of 1995). This portion of the preamble summarizes the FAA's analysis of the economic impacts of this proposed rule.

In conducting these analyses, FAA has determined that this proposed rule: (1) has benefits that justify its costs, (2) is not an economically "significant regulatory action" as defined in section 3(f) of Executive Order 12866, (3) is "significant" as defined in DOT's Regulatory Policies and Procedures; (4) would not have a significant economic impact on a



substantial number of small entities; (5) would not create unnecessary obstacles to the foreign commerce of the United States; and (6) would not impose an unfunded mandate on state, local, or tribal governments, or on the private sector by exceeding the threshold identified above. These analyses are summarized as follows.

#### Who is Potentially Affected by This Proposed Rule

There are 4,105 repair stations in the United States and 739 repair stations in 64 foreign countries that the FAA has certificated to work on N-registered airplanes. For purposes of this analysis, of those 4,105 repair stations, 1,838 are defined to be “small” with 10 or fewer employees, 1,913 are defined to be “medium-sized” with between 11 and 199 employees, and 354 are defined to be “large” with 200 or more employees. The FAA also forecasts that 106 repair stations in the United States will annually seek to be certified by the FAA. Finally, although this proposed rule would also affect existing and future repair stations in foreign countries, Executive Order 12866 requires the FAA to analyze the economic impacts of this proposed rule only on repair stations located in the United States.

#### Total Benefits and Costs of this Rule

The total costs of this proposal would be relatively small (\$14.493 million over a 10-year period, spread amongst approximately 5,000 repair stations), but it is difficult to quantify the benefits. We believe, however, that the potential benefits, which derive in part from (1) giving the FAA authority to (a) deny a repair station certificate to an applicant whose past performance resulted in a revocation, and (b) revoke all FAA-issued certificates held by any person who makes fraudulent or intentionally false entries or records; (2) defining what operations specifications are and providing a well-defined process for both

industry and the FAA to amend them; and (3) updating the ratings system, justify the costs of the proposed rule.

The current rule provides that, with certain unrelated restrictions, an applicant who meets the requirements of the rule is entitled to a repair station certificate regardless of a past regulatory non-compliance history, no matter how egregious. Currently an applicant, based on a successful showing of meeting the minimum requirements for a certificate (*e.g.*, the personnel, housing, facilities, equipment, materials, and data) is entitled to a certificate regardless of past negative performance, such as multiple rule violations or having a certificate revoked. This entitlement provides no latitude to the FAA. Based on a fatal accident that likely would not have occurred if the FAA had a mechanism in place to deny a certificate to a “bad actor,” the National Transportation Safety Board (NTSB) identified this *entitlement* as a potential safety issue, and the FAA agrees.

The FAA is aware of instances where persons whose repair station certificates were revoked continued to operate by obtaining new repair station certificates shortly after the revocation process. In one of these situations, a key management official with decision-making authority (chief inspector) from a repair station that lost its certificate for serious maintenance-related violations applied for and received a new repair station certificate. That individual also became the chief inspector at the newly-certificated repair station. While under the chief inspector’s direction, employees of the newly-certificated station performed improper maintenance on a number of propellers, one of which came apart in flight causing a fatal accident.

As a result of this accident, the National Transportation Safety Board (NTSB), in a Safety Recommendation dated February 9, 2004 (A-04-01 and A-04-02), expressed

concern that the FAA did not have a mechanism for preventing individuals who were associated with a previously revoked repair station, such as the owner described above, from continuing to operate through a new repair station. The NTSB noted that the FAA has such a mechanism in place for air carriers and other commercial operators. Section 119.39(b) allows the FAA to deny an application for a Part 121 or 135 air carrier or operating certificate. This can occur if the applicant previously held a certificate that was revoked or if a person who exercised control over (or held a key management position in) a previously revoked operator will be exercising control over (or hold a key management position in) the new operator.

With total present-value costs over a ten year period of \$13.045 million, this rule would be cost-beneficial if it prevents at least three fatalities over 10 years. This benefit could accrue from preventing one or more fatal accidents during the ten-year period, depending on the number of persons who would have been on board. The FAA believes that one or more such accidents are likely to occur during that period and this rule is necessary to prevent them. If this proposed provision had been in place prior to the accident described above, the FAA would have denied the repair station certificate application, and the faulty propeller maintenance would not have occurred—thus, neither would the accident.

In concurrence with an NTSB recommendation, the proposed rule would change this entitlement to an eligibility that will provide the FAA the ability to deny a certificate application based on enforcement history, as is currently the case with air carrier applicants. Also, a repair station certificate is effective until surrendered, suspended, or revoked. A repair station under investigation could potentially surrender a certificate to

terminate an ongoing investigation resulting in a lack of enforcement history. The NTSB recommended, and the FAA agrees, that a repair station should not be able to force the FAA to terminate an investigation by surrendering a certificate which would result in a lack of enforcement history. This history would be important evidence to support the agency's denying a certificate under the previously described circumstances. In concurrence with the NTSB recommendation, the proposed rule would specify that a certificate surrender is not valid until the FAA accepts the certificate. The costs of being able to deny certification to an applicant with a history of non-compliance is minimal, but the benefits are the potential avoidance of accidents, thereby increasing the safety of the flying public.

We also believe the current ratings system, which dates to the 1930's and 1940's, does not adequately address the way current aircraft are constructed and maintained. The current ratings system hampers the FAA's ability to appropriately rate repair stations, and it impedes repair stations' ability to accurately describe the work they perform. The repair station community and the FAA have struggled, and continue to struggle, with the application of current technology and business practices in an antiquated rule. The proposed rule would accommodate current technologies and provide regulatory flexibility to accommodate future technological development. This would benefit the repair station community by applying modern, consistent, unambiguous terminology throughout the regulated industry.

The proposed rule would also allow a repair station the option of either maintaining its current procedures in applying for a rating or providing the FAA with a capabilities list stating the products on which it can work. In recent years, some repair stations have preferred to develop a capabilities list, which can more efficiently be used to obtain FAA

approvals for expanding product work. Repair stations would be allowed to use a capabilities list so long as the list follows the FAA format that would be developed. This format consistency would allow the FAA to more efficiently know exactly which repair stations are performing specific repairs. The FAA is unable to estimate this potential efficiency savings and requests data from the public on these benefits.

The proposed rule would also allow a repair station the option of either maintaining its current procedures in applying for a rating or to supply the FAA with a capabilities list stating the products on which it can work. In recent years, some repair stations have preferred to develop a capabilities list, which can more efficiently be used to obtain FAA approvals for expanding product work. Repair stations would be allowed to use a capabilities list so long as the list follows the FAA format that would be developed. This format consistency would allow the FAA to more efficiently know exactly which repair stations are performing specific repairs. The FAA is unable to estimate this potential efficiency savings and requests data from the public.

As seen in Table 1, during the 2011 – 2020 period of this analysis, the proposed rule would impose compliance costs of \$14.493 million on existing and future repair stations, which have a present value of \$13.045 million using a 7 percent discount rate and a present value of \$13.836 million using a 3 percent discount rate.

TABLE 1  
TOTAL AND PRESENT VALUE COMPLIANCE COSTS BY US REPAIR STATION  
SIZE  
(2011 – 2020)  
(Millions of 2010 Dollars)

REPAIR STATION SIZE	NUMBER OF REPAIR STATIONS	COMPLIANCE COSTS	
			PRESENT VALUE

(Number of Employees)		TOTAL	7 PERCENT	3 PERCENT
SMALL (1 – 10)	1,838	\$ 1.949	\$ 1.738	\$ 1.852
MEDIUM (11-199)	1,913	\$ 5.226	\$ 4.699	\$ 4.987
LARGE (200+)	354	\$ 7.318	\$ 6.608	\$ 6.997
<b>TOTAL</b>	<b>4,105</b>	<b>\$14.493</b>	<b>\$13.045</b>	<b>\$13.836</b>

As seen in Table 2, the FAA estimates that the average one-time compliance cost would be \$1,146 for a small repair station, \$2,848 for a medium-sized repair station, and \$21,474 for a large repair station.

TABLE 2  
AVERAGE ONE-TIME COMPLIANCE COSTS FOR A REPAIR STATION BY  
REPAIR STATION SIZE  
(2011 – 2020)

Repair Station Size	One-Time
Small	\$ 1,146
Medium	\$ 2,848
Large	\$21,474

Consequently, in light of the propeller accident and the NTSB recommendation based on it, the FAA believes that the proposed rule’s potential benefits would be greater than its potential compliance costs if it prevented an accident with at least three fatalities during the next ten years.

#### Cost Assumptions and Sources of Information

- Discount rates – 7% and 3%.
- Period of analysis – 2011 – 2020.
- Monetary values expressed in 2010 dollars.

#### Costs of this Rulemaking

The proposed rule would impose compliance costs on repair stations to

1. Apply for a rating; and
2. Revise their manuals.

As seen in Table 3, the estimated total compliance costs of the proposed repair station manual revision (\$12.869 million) would be approximately 88 percent of the total compliance costs.

TABLE 3

SUMMARY OF TOTAL AND PRESENT VALUES OF THE COMPLIANCE COSTS  
BY PROVISION AND BY REPAIR STATION SIZE  
(2011 – 2020)  
(Millions of 2010 Dollars)

	Compliance Costs		
		Present Value	
PROVISION	Total	7 Percent	3 Percent
RATING SYSTEM APPLICATION	\$ 1.624	\$ 1.412	\$ 1.524
REPAIR STATION MANUAL REVISION	\$12.869	\$11.633	\$12.312
<b>TOTAL</b>	<b>\$14.493</b>	<b>\$13.045</b>	<b>\$13.836</b>

### Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (Public Law 96-354) (RFA) establishes “as a principle of regulatory issuance that agencies shall endeavor, consistent with the objectives of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation. To achieve this principle, agencies are required to solicit and consider flexible regulatory proposals and to explain the rationale for their actions to assure that such proposals are given serious consideration.” The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

However, if an agency determines that a rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

The FAA believes that this proposed rule would not have a significant impact on a substantial number of small entities for the following reason:

The Small Business Administration classifies “small” entities based on either employment or annual revenue. For this proposed rule, a small entity is defined as “Other Support Activities for Air Transportation” (North American Industrial Classification System 488190) with revenues of \$7 million or less. Revenue data compiled by Dun and Bradstreet indicates that of the repair stations for which data are available, 2,354 repair stations have revenues of \$7 million or less and that the average revenue per small entity is \$1,272,500. The initial compliance cost to a small repair station would average about \$4,000. This cost would be less than one percent of the average annual revenue and less than two percent of the annual revenue for firms that earn more than \$200,000.

Therefore, the FAA certifies that this proposed rule would not have a significant economic impact on a substantial number of small entities. The FAA solicits comments regarding this determination.

#### **Unfunded Mandates Assessment**



Title II of the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (in 1995 dollars) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action." The FAA currently uses an inflation-adjusted value of \$143.1 million in lieu of \$100 million. This proposed rule does not contain such a mandate; therefore, the requirements of Title II of the Act do not apply.

### **International Trade Impact Assessment**

The Trade Agreements Act of 1979 (Public Law 96-39), as amended by the Uruguay Round Agreements Act (Public Law 103-465), prohibits Federal agencies from establishing standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Pursuant to these Acts, the establishment of standards is not considered an unnecessary obstacle to the foreign commerce of the United States, so long as the standard has a legitimate domestic objective, such the protection of safety, and does not operate in a manner that excludes imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. The FAA has assessed the potential effect of this proposed rule and determined that it would ensure the safety of the American public and does not exclude foreign repair stations that meet this objective. As a result, this rule is not considered as creating an unnecessary obstacle to foreign commerce.

### **Paperwork Reduction Act**

The Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)) requires that the FAA consider the impact of paperwork and other information collection burdens imposed on the public. According to the 1995 amendments to the Paperwork Reduction Act (5 CFR 1320.8(b)(2)(vi)), an agency may not collect or sponsor the collection of information, nor may it impose an information collection requirement unless it displays a currently valid Office of Management and Budget (OMB) control number.

This proposal contains a revision of a currently approved collection (OMB-2120-0682) subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)). The title, description, and number of respondents, frequency of the collection, and estimate of the annual total reporting and recordkeeping burden are shown below:

Title: Repair Stations (14 CFR part 145)

Summary: Part 145 describes how to obtain a repair station certificate. The part also contains the rules a certificated repair station must follow related to its performance of maintenance, preventive maintenance, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which part 43 applies. It also applies to any person who holds or is required to hold a repair station certificate issued under this part.

Use: Specifically, the information is required from applicants who wish repair station certification. Applicants must submit the required data to the appropriate FAA District Office for review and acceptance/approval. If the information is satisfactory, an onsite inspection is conducted. When all Part 145 requirements are met an air agency certificate and repair station operations specifications with appropriate ratings and limitations is issued.

Part 145 is being updated and revised. The action is necessary because many portions of the current regulations do not reflect current repair station business practices, aircraft maintenance practices, or advances in aircraft technology.

Respondents: There are 3,704 repair stations.

Frequency: The FAA expects this to be a one-time burden on the affected public.

Annual Burden Estimate:

- Estimated average burden per employee: \$31 for a One-Time Collection
- Estimated Annual Burden Hours: 0 Hours
- Estimated Annual Burden Costs: \$0

The agency is soliciting comments to:

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(3) Enhance the quality, utility, and clarity of the information to be collected;

and

(4) Minimize the burden of collecting information on those who are to respond, including by using appropriate, automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Individuals and organizations may send comments on the information collection requirement to the address listed in the ADDRESSES section at the beginning of this preamble by [Insert date 90 days after date of publication in the Federal Register].

Comments also should be submitted to the Office of Management and Budget, Office of

Information and Regulatory Affairs, Attention: Desk Officer for FAA, New Executive Building, Room 10202, 725 17<sup>th</sup> Street, NW., Washington, DC 20053.

#### **IV. International Compatibility**

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is FAA policy to conform to International Civil Aviation Organization (ICAO) Standards and Recommended Practices to the maximum extent practicable. The FAA has determined that there are no ICAO Standards and Recommended Practices that correspond to these proposed regulations.

#### **Executive Order Determinations**

##### **A. Executive Order 13132, Federalism**

The FAA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. We determined that this action would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government, and, therefore, would not have federalism implications.

##### **B. Executive Order 13211, Regulations that Significantly Affect Energy Supply, Distribution, or Use**

The FAA has analyzed this NPRM under Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use (May 18, 2001). We have determined that it is not a “significant energy action” under the executive order and it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

#### **Environmental Analysis**

FAA Order 1050.1E identifies FAA actions that are categorically excluded from preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act in the absence of extraordinary circumstances. The FAA has determined this proposed rulemaking action qualifies for the categorical exclusion identified in paragraph 312(d) and involves no extraordinary circumstances.

### **Additional Information**

#### Comments Invited:

The FAA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, please send only one copy of written comments, or if you are filing comments electronically, please submit your comments only one time.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

#### Proprietary or Confidential Business Information

Do not file in the docket information that you consider to be proprietary or confidential business information. Send or deliver this information directly to the person identified in the FOR FURTHER INFORMATION CONTACT section of this document. You must mark the information that you consider proprietary or confidential. If you send the information on a disk or CD ROM, mark the outside of the disk or CD ROM and also identify electronically within the disk or CD ROM the specific information that is proprietary or confidential.

Under 14 CFR 11.35(b), when we are aware of proprietary information filed with a comment, we do not place it in the docket. We hold it in a separate file to which the public does not have access, and we place a note in the docket that we have received it. If we receive a request to examine or copy this information, we treat it as any other request under the Freedom of Information Act (5 U.S.C. 552). We process such a request under the DOT procedures found in 49 CFR part 7.

#### Availability of Rulemaking Documents

You can get an electronic copy of rulemaking documents using the Internet by—

1. Searching the Federal eRulemaking Portal (<http://www.regulations.gov>);
2. Visiting the FAA's Regulations and Policies web page at

[http://www.faa.gov/regulations\\_policies](http://www.faa.gov/regulations_policies) or

3. Accessing the Government Printing Office's web page at

<http://www.gpo.gov/fdsys/>.

You can also get a copy by sending a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue S.W.,

Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the docket number or notice number of this rulemaking.

You may access all documents the FAA considered in developing this proposed rule, including economic analyses and technical reports, from the internet through the Federal eRulemaking Portal referenced in paragraph (1).

#### **List of Subjects in 14 CFR Part 43**

Aircraft, Aviation safety.

#### **List of Subjects in 14 CFR Part 91**

Aircraft, Airmen, Aviation safety, Reporting and recordkeeping requirements.

#### **List of Subjects in 14 CFR Part 145**

Air carriers, Air transportation, Aircraft, Aviation safety, Recordkeeping and reporting, Safety.

#### **The Proposed Amendment**

In consideration of the foregoing, the Federal Aviation Administration proposes to amend Chapter I of Title 14, Code of Federal Regulations, as follows:

#### **PART 43 — MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION**

1. The authority citation for part 43 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701, 44703, 44705, 44707, 44711, 44713, 44717, 44725.

2. Amend Appendix B by revising paragraph (b)(3) to read as follows:

## APPENDIX B TO PART 43 – RECORDING OF MAJOR REPAIRS AND MAJOR ALTERATIONS

\* \* \* \* \*

(b) \* \* \*

(3) Give the aircraft owner an approval for return to service signed by an authorized representative of the repair station and incorporating the following information:

\* \* \* \* \*

### PART 91 — GENERAL OPERATING AND FLIGHT RULES

3. The authority citation for part 91 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44704, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506-46507, 47122, 47508, 47528-47531, articles 12 and 29 of the Convention on International Civil Aviation (61 Stat. 1180).

4. Amend § 91.171 by revising paragraph (b)(1) to read as follows:

#### **§ 91.171 VOR equipment check for IFR operations.**

\* \* \* \* \*

(b) \* \* \*

(1) Use, at the airport of intended departure, an FAA-operated or approved test signal or a test signal radiated by an appropriately rated repair station or, outside the United States, a test signal operated or approved by an appropriate authority to check the VOR equipment (the maximum permissible indicated bearing error is plus or minus 4 degrees);  
or

\* \* \* \* \*



5. Amend § 91.319 by revising paragraph (g)(1) to read as follows

**§ 91.319 Aircraft having experimental certificates: Operating limitations.**

\* \* \* \* \*

(g) \* \* \*

(1) Been inspected by an appropriately certificated person in accordance with the operating limitations issued as part of the airworthiness certificate for that aircraft; or

\* \* \* \* \*

6. Amend § 91.327 by revising paragraphs (b)(1) and (2) and (c)(1) to read as follows

**§ 91.327 Aircraft having a special airworthiness certificate in the light-sport category: Operating limitations.**

\* \* \* \* \*

(b) \* \* \*

(1) The aircraft is maintained by an appropriately certificated person in accordance with the applicable provisions of part 43 of this chapter;

(2) A condition inspection is performed once every 12 calendar months by an appropriately certificated person in accordance with the operating limitations issued as part of the airworthiness certificate for that aircraft;

\* \* \* \* \*

(c) \* \* \*

(1) Been inspected by an appropriately certificated person in accordance with the operating limitations issued as part of the airworthiness certificate for that aircraft and been approved for return to service in accordance with part 43 of this chapter; or

\* \* \* \* \*

7. Amend § 91.409 by revising paragraph (d)(1) to read as follows

**§ 91.409 Inspections**

\* \* \* \* \*

(d) \* \* \*

(1) An appropriately certificated person or the manufacturer of the aircraft to supervise or conduct the progressive inspection.

\* \* \* \* \*

8. Amend § 91.411 by revising paragraph (b)(2) to read as follows

**§ 91.411 Altimeter system and altitude reporting equipment tests and inspections.**

\* \* \* \* \*

(b) \* \* \*

(2) An appropriately certificated person.

\* \* \* \* \*

9. Amend § 91.413 by revising paragraph (c)(1) to read as follows

**§ 91.413 ATC transponder tests and inspections.**

\* \* \* \* \*

(c) \* \* \*

(1) An appropriately certificated person.

\* \* \* \* \*

10. Amend Appendix A to part 91.413 by revising paragraph (b)(1) in section 4 as follows

**Appendix A to Part 91—Category II Operations: Manual, Instruments, Equipment, and Maintenance**

\* \* \* \* \*

4. Maintenance program

\* \* \* \* \*

(b) \* \* \*

(1) It must be performed by an appropriately certificated person.

\* \* \* \* \*

**PART 145 — REPAIR STATIONS**

11. The authority citation for part 145 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701-44702, 44707, 44709, 44717.

12. Revise § 145.1 to read as follows:

**§ 145.1 Applicability.**

Subparts A through E of this part:

(a) Expire and are reserved on [the date 24 months after the effective date of the rule].

(b) Apply to repair stations certificated prior to [the effective date of the rule] until such time as those repair stations apply for and are certificated under subparts F through J of this part, or [the date 24 months after the effective date of the rule] whichever occurs first.

(c) Contain the rules a repair station certificated prior to [the effective date of the rule] must follow related to its performance of maintenance, preventive maintenance, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part to which part 43 of this chapter applies, until such time as those repair stations must comply with subparts F through J of this part. It also applies to any person who holds out as an FAA-certified repair station certificate issued under this part.

13. Amend § 145.3 by revising the introductory text to read as follows:

**§ 145.3 Definition of terms.**

For the purposes of subparts A through E, the following definitions apply:

\* \* \* \* \*

14. Section 145.12 is added to subpart A to read as follows:

**§ 145.12 Repair station records: Falsification, reproduction, or alteration.**

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false entry in any record or report (including any application for a repair station certificate or rating) that is required to be made, kept, or used to show compliance with any requirement under this part;

(2) Any reproduction, for fraudulent purpose, of any record or report (including any application for a repair station certificate or rating) under this part; or

(3) Any alteration, for fraudulent purpose, of any record or report (including any application for a repair station certificate or rating) under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking the repair station certificate and any certificate, approval, or authorization issued by the FAA held by that person.

15. Amend § 145.51 by revising paragraphs (a) and (d) to read as follows:

**§ 145.51 Application for certificate.**

(a) An application for a repair station certificate and rating must be made in accordance with § 145.1051.

\* \* \* \* \*

(d) An application for an additional rating or amended repair station certificate must be made in accordance with § 145.1051.

16. Amend § 145.53 by revising paragraph (a) to read as follows:

**§ 145.53 Issue of certificate.**

(a) Except as provided in paragraph (b), (c), or (d) of this section, a person who meets the requirements of subparts A through E of this part is entitled to a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interest of safety, until [the date 24 months after the effective date of the rule] at which time any certificate issued under the requirements of subparts A through E of this part is no longer valid.

\* \* \* \* \*

17. Amend § 145.55 by revising paragraphs (a), (b) and (c)(1) to read as follows:

**§ 145.55 Duration and renewal of certificate.**

(a) A certificate or rating issued to a repair station located in the United States, is effective from the date of issue until the repair station surrenders it or the FAA suspends or revokes it, or [the date 24 months after the effective date of the rule] whichever occurs first.

(b) A certificate or rating issued to a repair station located outside the United States is effective from the date of issue until the last day of the 12th month after the date of issue unless the repair station surrenders the certificate or the FAA suspends or revokes it, but no longer than [the date 24 months after the effective date of the rule]. The FAA may renew the certificate or rating for 24 months, but not beyond [the date 24 months after the effective date of the rule] if the repair station has operated in compliance with the applicable requirements of part 145 within the preceding certificate duration period.

(c) \* \* \*

(1) Submit its request for renewal no later than 30 days before the repair station's current certificate expires. If a request for renewal is not made within this period, the repair station must follow the application procedures in § 145.1051.

\* \* \* \* \*

18. Amend § 145.57 by revising paragraphs (a) introductory text and (b) to read as follows:

**§ 145.57 Amendment to or transfer of certificate.**

(a) The holder of a repair station certificate must apply for any voluntary change to its certificate in accordance with § 145.1051. A change to the certificate must include certification in compliance with § 145.53(c) or (d), if not previously submitted. A certificate change is necessary if the certificate holder—

\* \* \* \* \*

(b) If the holder of a repair station certificate sells or transfers its assets, the new owner must apply for certification in accordance with § 145.1051.

19. Amend § 145.105 by revising paragraph (a) to read as follows:

**§ 145.105 Change of location, housing, or facilities.**

(a) A certificated repair station that makes any changes to its housing or facilities required by § 145.103 that could have a significant effect on its ability to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications must comply with § 145.1051.

\* \* \* \* \*

20. Amend part 145 by adding new subpart F to read as follows:

## Subpart F—General

145.1001 Applicability.

145.1003 Definition of terms.

145.1005 Certificate and operations specifications requirements.

145.1012 Repair station records: Falsification, reproduction, or alteration.

## **Subpart F - General**

### **§ 145.1001 Applicability.**

Subparts F through J of this part:

- (a) Describe how to obtain a repair station certificate after [effective date of rule].
- (b) Contain the rules a repair station receiving a certificate must follow related to its performance of maintenance, preventive maintenance, and alterations of civil aircraft, airframes, aircraft engines, propellers, appliances, or component parts to which part 43 of this chapter applies.
- (c) Apply to any person who holds out as an FAA-certificated repair station.

### **§ 145.1003 Definition of terms.**

For the purposes of subparts F through J of this part, the following definitions apply:

- (a) Accountable manager means the person designated by the certificated repair station who is responsible for and has the authority over all repair station operations that are conducted under part 145, including ensuring that repair station personnel follow the regulations, and serves as the primary contact with the FAA.
- (b) Article means an aircraft, airframe, aircraft engine, propeller, appliance, or component part.

(c) Avionics are articles generally associated with the processing of digital electrical signals. Examples include: radios, navigation equipment, radar, data processors, and cathode ray tubes.

(d) Directly in charge means having the responsibility for the work of a certificated repair station that performs maintenance, preventive maintenance, alterations, or other functions affecting aircraft airworthiness. A person directly in charge does not need to physically observe and direct each worker constantly but must be readily available for consultation on matters requiring instruction or decision from higher authority.

(e) Line maintenance means maintenance performed for an air carrier certificated under part 121 or part 135 of this chapter, or a foreign air carrier or foreign person operating a U.S.-registered aircraft in common carriage under part 129 of this chapter, which is generally performed at the ramp, parking area, or gate, and typically will not exceed 24 continuous hours per aircraft.

**§ 145.1005 Certificate and operations specifications requirements.**

(a) No person may operate as a certificated repair station without, or in violation of, a repair station certificate, rating, or operations specifications issued under this part.

(b) The certificate and operations specifications issued to a certificated repair station must be available on the premises for inspection by the public and the FAA.

**§ 145.1012 Repair station records: Falsification, reproduction, or alteration.**

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false entry in any record or report (including any application for a repair station certificate or rating) that is required to be made, kept, or used to show compliance with any requirement under this part;



(2) Any reproduction, for fraudulent purpose, of any record or report (including any application for a repair station certificate or rating) under this part; or

(3) Any alteration, for fraudulent purpose, of any record or report (including any application for a repair station certificate or rating) under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking the repair station certificate and any certificate, approval, or authorization issued by the FAA held by that person.

21. Amend part 145 by adding new subpart G to read as follows:

**Subpart G—Certification**

145.1051 Application for certificate.

145.1053 Issue of certificate.

145.1055 Duration and renewal of certificate.

145.1056 Amendment to or transfer of certificate.

145.1057 Operations specifications.

145.1058 Amending operations specifications.

145.1059 Ratings.

145.1061 Limitations to ratings.

**Subpart G – Certification**

**§ 145.1051 Application for certificate.**

(a) An application for a repair station certificate and rating must be made in a format acceptable to the FAA and must include the following:

(1) For initial applicants, a letter of compliance detailing how the applicant will comply with all sections of this part.

- (2) A repair station manual acceptable to the FAA as required by § 145.1207;
  - (3) A quality control manual acceptable to the FAA as required by § 145.1207 (the repair station and quality control manuals may be contained in the same document if they are clearly identified);
  - (4) A list that includes each product or article for which the application is made, as defined in the rating system identified in § 145.1059.
  - (5) An organizational chart of the repair station with the names and titles of managing and supervisory personnel;
  - (6) The physical address and a description of all the repair station housing and facilities, including any additional fixed locations requested for approval in accordance with § 145.1103(d).
  - (7) A list of the maintenance functions, for approval by the FAA, to be performed for the repair station under contract by another person under the provisions of § 145.1217; and
  - (8) A description of the training program for approval by the FAA in accordance with § 145.1163.
- (b) The technical data, housing, facilities, equipment, tools, test apparatus, materials, and personnel required for the certificate and rating, or for an additional rating, must be in place for inspection at the time of certification or rating approval by the FAA.
- (c) In addition to meeting the other applicable requirements for a repair station certificate and rating, an applicant for a repair station certificate and rating located outside the United States must meet the following requirements:
- (1) The applicant must show that the repair station certificate and/or rating is necessary for maintaining or altering the following:

- (i) U.S.-registered aircraft or articles for use on U.S.-registered aircraft, or
- (ii) Foreign-registered aircraft operated under the provisions of part 121 or part 135 of this chapter, or articles for use on those aircraft.
- (2) The applicant must show that the fee prescribed by the FAA has been paid.
- (d) An application for an additional rating, amended repair station certificate, or renewal of a repair station certificate must be made in a format acceptable to the FAA. The application should include only that information necessary to substantiate the change or renewal of the certificate.
- (e) An application for a repair station certificate may be denied if the FAA finds that:
  - (1) The applicant holds a repair station certificate in the process of being revoked, or previously held a repair station certificate that was revoked;
  - (2) The applicant intends to fill or fills a management position with an individual who exercised control over or who held the same or a similar position with a certificate holder whose repair station certificate was revoked, or is in the process of being revoked, and that individual materially contributed to the circumstances causing the revocation or causing the revocation process;
  - (3) An individual who will hold a management position previously held a management position with a certificate holder whose repair station certificate was revoked, or is in the process of being revoked, and the individual materially contributed to the circumstances causing the revocation or causing the revocation process; or
  - (4) An individual who will have control over or substantial ownership interest in the applicant had the same or similar control or interest in a certificate holder whose repair station certificate was revoked, or is in the process of being revoked, and that individual

materially contributed to the circumstances causing the revocation or causing the revocation process.

**§ 145.1053 Issue of certificate.**

(a) A person who meets the requirements of this part is eligible to be issued a repair station certificate with appropriate ratings prescribing such operations specifications and limitations as are necessary in the interest of safety.

(b) If the person is located in a country with which the United States has a bilateral aviation safety agreement, the FAA may find that the person meets the requirements of this part based on a certification from the civil aviation authority of that country or an authority acceptable to the FAA. This certification must be made in accordance with implementation procedures signed by the FAA or the FAA's designee.

(c) Before an air agency certificate can be issued for a repair station that is located within the United States, the applicant shall certify in writing that all hazmat employees (as defined in 49 CFR 171.8) for the repair station, its contractors, or subcontractors are trained as required in 49 CFR part 172, subpart H.

(d) Before an air agency certificate can be issued for a repair station located outside the United States, the applicant shall certify in writing that all employees for the repair station, its contractors, or subcontractors performing a job function concerning the transport of dangerous goods (hazardous material) are trained as outlined in the most current edition of the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air.

**§ 145.1055 Duration and renewal of certificate.**

- (a) A certificate or rating issued to a repair station located in the United States is effective from the date of issue until the repair station surrenders the certificate and the FAA accepts it for cancellation, or the FAA suspends or revokes it.
- (b) A certificate or rating issued to a repair station located outside the United States is effective from the date of issue until the last day of the 12th month after the date of issue unless the repair station surrenders the certificate and the FAA accepts it for cancellation, or the FAA suspends or revokes it. The FAA may renew the certificate or rating for 24 months if the repair station has operated in compliance with the applicable requirements of part 145 within the preceding certificate duration period.
- (c) A certificated repair station located outside the United States that applies for a renewal of its repair station certificate must—
  - (1) Submit its request for renewal no later than 30 days before the repair station's current certificate expires. If a request for renewal is not made within this period, the repair station must follow the application procedures in § 145.1051;
  - (2) Send its request for renewal to the FAA office that has jurisdiction over the certificated repair station; and
  - (3) Show that the fee prescribed by the FAA has been paid.
- (d) The holder of an expired, surrendered, suspended, or revoked certificate must return it to the FAA.

**§ 145.1056 Amendment to or transfer of certificate.**

- (a) An application to amend a repair station certificate must be made to the certificate-holding district office in a form and manner acceptable to the FAA. The request must meet

the certification requirements of § 145.1051(d) and the statement required by § 145.1053(c) or (d) must be included, if not previously submitted.

(b) The certificate holder must file the application made under paragraph (a) of this section with the certificate holding district office at least 15 days before the date proposed by the applicant for the amendment to become effective, unless the FAA accepts filing within a shorter period.

(c) A certificate amendment is necessary if the certificate holder changes the location of the repair station or requests to add or amend a rating.

(d) If the holder of a repair station certificate sells or transfers its assets, the new owner must apply for an amended certificate in accordance with § 145.1051.

**§ 145.1057 Operations specifications.**

(a) Except for operations specifications paragraphs specifying ratings and limitations to those ratings, operations specifications are not part of a certificate.

(b) Operations specifications issued under this part are effective as long as the repair station certificate is valid.

(c) The operations specifications issued to a repair station must be available at the repair station for inspection by the public and the FAA at the address required by paragraph

(d)(1) of this section.

(d) Each certificate holder's operations specifications must contain—

(1) The physical address of the certificate holder's fixed location for operation of the repair station. The address shall also serve as the address for mailed paper correspondence between the FAA and the certificate holder;

(2) The ratings held and any limitations to those ratings;

- (3) Any special authorizations and limitations for the conduct of repair station operations;
- (4) Any exemption granted by the FAA to the repair station; and
- (5) Any other information the FAA determines is necessary.
- (e) If the optional capability list provided for in §145.1215 is not used, each certificate holder's operations specifications must, within the rating categories authorized under §145.1059, identify each airframe, powerplant, or propeller by manufacturer, model, and series as applicable. For a Component rating, the operations specifications must identify each component or appliance included in the rating by manufacturer, manufacturer-designated nomenclature, and basic part number. For a Specialized Service rating, the operations specifications must identify each specific and unique maintenance function and the FAA acceptable specification associated with each function.

**§ 145.1058 Amending operations specifications.**

- (a) The FAA may amend any operations specifications issued under this part if—
  - (1) The operations specification was issued erroneously;
  - (2) The FAA revises the operations specifications template;
  - (3) The FAA determines that safety in air commerce and the public interest require the amendment; or
  - (4) The certificate holder applies for the amendment and the FAA determines that safety in air commerce and the public interest allows the amendment.
- (b) Except for an amendment involving a rating or a limitation to a rating, which would be considered a certificate action, and except as provided in paragraph (e) of this section for other amendments in which the certificate-holding district office finds that an

emergency exists requiring immediate action, when the FAA initiates an amendment to a certificate holder's operations specifications, the following procedure applies:

(1) The certificate-holding district office notifies the certificate holder in writing of the proposed amendment.

(2) The certificate-holding district office sets a reasonable period (but not less than 7 days) within which the certificate holder may submit written information, views, and arguments on the amendment.

(3) After considering the material presented, the certificate-holding district office notifies the certificate holder of—

(i) The adoption of the proposed amendment;

(ii) The partial adoption of the proposed amendment; or

(iii) The withdrawal of the proposed amendment.

(4) If the certificate-holding district office issues an amendment to the operations specifications, it becomes effective not less than 30 days after the certificate holder receives notice of it unless—

(i) The certificate-holding district office finds under paragraph (e) of this section that an emergency exists requiring immediate action with respect to safety in air commerce; or

(ii) The certificate holder petitions for reconsideration of the amendment under paragraph (d) of this section.

(c) If the certificate holder applies for an amendment to its operations specifications, the following procedure applies:



- (1) The certificate holder must file an application to amend its operations specifications at least 15 days before the date proposed by the applicant for the amendment to become effective;
- (2) The application must be submitted to the certificate-holding district office in a form and manner prescribed by the FAA.
- (3) After considering the material presented, the certificate-holding district office notifies the certificate holder of—
  - (i) The adoption of the applied-for amendment;
  - (ii) The partial adoption of the applied-for amendment; or
  - (iii) The denial of the applied-for amendment. The certificate holder may petition for reconsideration of a denial under paragraph (d) of this section.
- (4) If the certificate-holding district office approves the amendment following coordination with the certificate holder regarding its implementation, the amendment is effective on the date the FAA approves it.
- (d) When a certificate holder seeks reconsideration of a decision from the certificate-holding district office concerning the amendment of operations specifications, the following procedure applies:
  - (1) The certificate holder must petition for reconsideration of that decision within 30 days of the date that the certificate holder receives a notice of denial of the amendment to its operations specifications, or of the date it receives notice of an FAA-initiated amendment to its operations specifications, whichever circumstance applies.
  - (2) The certificate holder must address its petition to the applicable Flight Standards Regional Division Manager.

(3) A petition for reconsideration, if filed within the 30-day period, suspends the effectiveness of any amendment issued by the certificate-holding district office unless the certificate-holding district office has found, under paragraph (e) of this section, that an emergency exists requiring immediate action with respect to safety in air transportation or air commerce, in which case the amendment remains in effect during the appeal.

(e) If the certificate-holding district office finds that an emergency exists requiring immediate action with respect to safety in air commerce that makes the procedures set out in paragraph (d) of this section impracticable or contrary to the public interest:

(1) The certificate-holding district office amends the operations specifications and makes the amendment effective on the day the certificate holder receives notice of it.

(2) In the notice to the certificate holder, the certificate-holding district office articulates the reasons for its finding that an emergency exists requiring immediate action with respect to safety in air commerce that makes it impracticable or contrary to the public interest to stay the effectiveness of the amendment.

#### **§ 145.1059 Ratings.**

(a) Airframe rating. The following categories are authorized under the airframe rating:

(1) Category 1: Aircraft certificated under parts 23 and 27.

(2) Category 2: Aircraft certificated under parts 25 and 29.

(3) Category 3: All other aircraft.

(i) A certificated repair station with an Airframe rating may perform maintenance, preventive maintenance, and alterations on airframes under the provisions listed on its operations specifications;

(ii) A certificated repair station with an Airframe rating shall not perform

maintenance, preventive maintenance, or alterations on those articles for which a Powerplant or Propeller rating is required, unless the repair station possesses the appropriate rating; and

(iii) A certificated repair station with an Airframe rating is not required to obtain a separate Component rating to maintain articles associated with its rating and capabilities.

(b) Powerplant rating. The following categories are authorized under the Powerplant rating:

(1) Category 1: Reciprocating engines.

(2) Category 2: Turbine engines.

(3) Category 3: Auxiliary Power Units (APU).

(4) Category 4: All other powerplants.

(i) A certificated repair station with a Powerplant rating may perform maintenance, preventive maintenance, and alterations on powerplants and auxiliary power units under the provisions listed on its operations specifications;

(ii) A certificated repair station with a Powerplant rating shall not perform maintenance, preventive maintenance, or alterations on those articles for which an Airframe or Propeller rating is required, unless the repair station possesses the appropriate rating; and

(iii) A certificated repair station with a Powerplant rating is not required to obtain a separate Component rating to maintain articles associated with its rating and capabilities.

(c) Propeller rating. The following categories are authorized under the Propeller rating:

(1) Category 1: Fixed-pitch and ground-adjustable pitch propellers.

- (2) Category 2: Variable-pitch propellers.
- (3) Category 3: All other propellers.
  - (i) A certificated repair station with a Propeller rating may perform maintenance, preventive maintenance, and alterations on propellers under the provisions listed on its operations specifications;
  - (ii) A certificated repair station with a Propeller rating shall not perform maintenance, preventive maintenance, or alterations on those articles for which an Airframe or Powerplant rating is required, unless the repair station possesses the appropriate rating; and
  - (iii) A certificated repair station with a Propeller rating is not required to obtain a separate Component rating to maintain articles associated with its rating and capabilities.
- (d) Component rating.
  - (1) A certificated repair station with a Component rating may perform maintenance, preventive maintenance, and alterations on appliances and components that are not installed on an airframe, powerplant, or propeller under the provisions listed on its operations specifications.
  - (2) A certificated repair station with a Component rating must have an Airframe, Powerplant, or Propeller rating with limitations in accordance with § 145.1061 to install articles on those products.
- (e) Specialized Service rating.
  - (1) The FAA may issue a Specialized Service rating to a certificated repair station that performs a specific and unique maintenance function.

- (2) The maintenance function must be performed in accordance with an FAA-acceptable specification.
- (3) The repair station's operations specifications must contain the specification used to perform the maintenance function. The specification may be:
  - (i) A current industry or military specification acceptable to the FAA or,
  - (ii) A specification developed by the applicant and approved by the FAA.
- (4) A certificated repair station may, under its Specialized Service rating, perform only the maintenance functions that are listed on the repair station's operations specifications.
- (5) A certificated repair station with a Specialized Service rating shall not contract out any maintenance function associated with that rating.

**§ 145.1061 Limitations to ratings.**

- (a) The FAA may issue limitations to the ratings of a certificated repair station for a particular type of airframe, powerplant, propeller, component, or specialized service that is listed on the repair station's operations specifications.
- (b) The repair station's operations specifications will identify the rating in § 145.1059 to which the limitations apply.
- (c) Limitations to any rating in § 145.1059 may be issued as deemed appropriate by the FAA, including, but not limited to, line maintenance.

22. Amend part 145 by adding new subpart H to read as follows:

Subpart H— Technical Data, Housing, Facilities, Equipment, and Materials

145.1101 General.

145.1103 Housing and facilities requirements.

145.1105 Change of location, housing, or facilities.

145.1107 Satellite repair stations.

145.1109 Technical data, equipment, tools, test apparatus, and materials requirements.

## **Subpart H – Technical Data, Housing, Facilities, Equipment, and Materials**

### **§ 145.1101 General.**

A certificated repair station must provide the technical data, housing, facilities, equipment, tools, test apparatus, and materials that meet the applicable requirements for the issuance of the certificate and any rating the repair station holds.

### **§ 145.1103 Housing and facilities requirements.**

(a) Each certificated repair station must provide and maintain—

(1) Suitable permanent housing for the facilities, equipment, materials, and personnel consistent with its ratings.

(2) Facilities for properly performing the maintenance, preventive maintenance, and alterations of articles for which it is rated. Facilities must include the following:

(i) Sufficient work space and areas for the proper segregation and protection of articles during all maintenance, preventive maintenance, and alterations;

(ii) Segregated work areas enabling environmentally hazardous or sensitive operations such as painting, cleaning, welding, avionics work, electronic work, and machining to be done properly and in a manner that does not adversely affect other maintenance or alterations of articles or activities;

(iii) Suitable racks, hoists, trays, stands, and other segregation means for the storage and protection of all articles undergoing maintenance, preventive maintenance, or alterations;

- (iv) Space sufficient to segregate and protect articles and materials stocked for installation from those articles undergoing maintenance, preventive maintenance, or alterations; and
  - (v) Ventilation, lighting, and control of temperature, humidity, and other climatic conditions sufficient to ensure personnel perform maintenance, preventive maintenance, and alterations to the standards required by this part.
- (b) A certificated repair station with an airframe rating must provide and maintain suitable permanent housing with the ability to enclose the largest type and model of aircraft for which it is rated. Notwithstanding this requirement for suitable permanent housing, the FAA may determine that a repair station with limitations to its airframe rating does not need to have housing to enclose an entire aircraft if the FAA determines that adequate environmental protection is provided by the repair station consistent with the limitations issued in accordance with § 145.1061.
- (c) A certificated repair station may perform maintenance, preventive maintenance, and alterations on articles outside of its housing if it provides suitable facilities that are acceptable to the FAA and meet the requirements of § 145.1103(a) so the work can be performed in accordance with the requirements of part 43 of this chapter.
- (d) A certificated repair station may continually perform maintenance, preventive maintenance, and alterations on any article for which it is rated at additional fixed locations if the following requirements are met:
- (1) The repair station applies for and receives approval of additional fixed locations.
  - (2) For a repair station located within the United States, the additional fixed location is within the geographical boundaries of the Certificate Holding District Office.

(3) For a repair station located outside of the United States, the additional fixed location is within close proximity of the certificated repair station, as determined by the FAA.

(4) The location is permanently affixed and is under the managerial control and authority of the repair station.

(5) The maintenance functions performed at the additional fixed locations are in support of and within the scope of the ratings listed on the repair station's operations specifications.

**§ 145.1105 Change of location, housing, or facilities.**

(a) A certificated repair station shall not change the location of its housing without written approval from the FAA.

(b) A certificated repair station shall not make any changes to its housing or facilities required by § 145.1103 that could have a significant effect on its ability to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications without written approval from the FAA.

(c) The FAA may prescribe the conditions, including any limitations, under which a certificated repair station must operate while it is changing its location, housing, or facilities.

**§ 145.1107 Satellite repair stations.**

(a) A certificated repair station under the managerial control of another certificated repair station may operate as a satellite repair station with its own certificate issued by the FAA. Each satellite repair station must:

(1) Meet the requirements for each rating it holds



- (2) Submit to its certificate holding district office the same manuals as the repair station that exercises managerial control. Each manual must identify any specific processes or procedures either unique to the satellite repair station or applicable only to the repair station with managerial control.
- (3) Submit to its certificate holding district office the same training program for approval as the repair station that exercises managerial control. The program must identify any specific processes or procedures either unique to the satellite repair station or applicable only to the repair station with managerial control.
- (4) Be able to demonstrate compliance with its manual.
- (5) Meet the housing and facility requirements of § 145.1103.
- (6) Have its own housing and facilities in a location with a physical address other than the repair station with managerial control.
- (b) Unless the FAA indicates otherwise, personnel and equipment from a certificated repair station with managerial control and from each of its satellite repair stations may be shared. However, inspection personnel must be designated for each satellite repair station and available at the satellite repair station any time a determination of airworthiness or approval for return to service is made. At other times, inspection personnel may be away from the premises but must be available by telephone, radio, or other electronic means.
- (c) A satellite repair station may not be located in a country other than the domicile country of the certificated repair station with managerial control.

**§ 145.1109 Technical data, equipment, tools, test apparatus, and materials requirements.**

(a) Except as otherwise prescribed by the FAA, a certificated repair station must have and maintain the equipment, tools, test apparatus, materials, and, in a format acceptable to the FAA, the technical data necessary to perform the maintenance, preventive maintenance, or alterations under its repair station certificate and operations specifications in accordance with part 43 of this chapter.

(b) Notwithstanding the requirement in paragraph (a) of this section for a repair station to have the necessary equipment, tools, and test apparatus, that requirement may be met for specialized and rarely used equipment, tools, and test apparatus if the repair station can demonstrate to the FAA it has made arrangements with another person to make those items available to the repair station at any time their use is required.

(c) A certificated repair station must ensure that all test and inspection equipment and tools used to make airworthiness determinations on articles are calibrated to a standard acceptable to the FAA.

23. Amend part 145 by adding new subpart I to read as follows:

Subpart I—Personnel

145.1151 Personnel requirements.

145.1153 Supervisory personnel requirements.

145.1155 Inspection personnel requirements.

145.1157 Personnel authorized to approve an article for return to service.

145.1159 Recommendation of a person for certification as a repairman.

145.1161 Records of management, supervisory, and inspection personnel.

145.1163 Training requirements.

145.1165 Hazardous materials training.

## **Subpart I -Personnel**

### **§ 145.1151 Personnel requirements.**

Each certificated repair station must—

- (a) Designate a repair station employee as the accountable manager;
- (b) Provide qualified personnel to plan, supervise, perform, and approve for return to service the maintenance, preventive maintenance, or alterations performed under the repair station certificate and operations specifications;
- (c) Ensure it has a sufficient number of employees with the training or knowledge and experience in the performance of maintenance, preventive maintenance, or alterations authorized by the repair station certificate and operations specifications to ensure all work, including work contracted to a noncertificated person in accordance with § 145.1217(b), is performed in accordance with part 43 of this chapter; and
- (d) Determine the abilities of its employees performing maintenance functions based on training, knowledge, experience, or practical tests.

### **§ 145.1153 Supervisory personnel requirements.**

- (a) A certificated repair station must ensure it has a sufficient number of supervisors to direct the work performed under the repair station certificate and operations specifications.

The supervisors must be present to oversee the work performed.

- (b) Each supervisor must—
  - (1) If employed by a repair station located inside the United States, be appropriately certificated under part 65 of this chapter for the work being supervised.
  - (2) If employed by a repair station located outside the United States-
    - (i) Meet the requirements of paragraph (b) (1) of this section; or

- (ii) Meet the eligibility requirements of § 65.101(a)(1), (2), (3) and (5) of this chapter.
- (c) A certificated repair station must ensure its supervisors understand, speak, read, and write English.

**§ 145.1155 Inspection personnel requirements.**

- (a) A certificated repair station must ensure that persons performing inspections under the repair station certificate and operations specifications are—
  - (1) Thoroughly familiar with the applicable regulations in this chapter and with the inspection methods, techniques, practices, aids, equipment, and tools used to determine the airworthiness of the article on which maintenance, preventive maintenance, or alterations are being performed; and
  - (2) Proficient in using the various types of inspection equipment and visual inspection aids appropriate for the article being inspected.
- (b) A certificated repair station must ensure its inspectors understand, speak, read, and write English.
- (c) A certificated repair station must ensure that an inspector is available at the article while performing inspections.

**§ 145.1157 Personnel authorized to approve an article for return to service.**

- (a) Each person authorized to approve an article for return to service must be thoroughly familiar with the applicable regulations in this chapter and proficient in the use of the various applicable inspection methods, techniques, and practices.
- (b) A certificated repair station located inside the United States must ensure that each person authorized to approve an article for return to service is appropriately certificated under part 65 of this chapter for the work approved.

(c) A certificated repair station located outside the United States must ensure that each person authorized to approve an article for return to service:

(1) Is certificated as required by paragraph (b) of this section, or;

(2) Meets the eligibility requirements of § 65.101(a) (1), (2), (3) and (5) of this chapter.

(d) A certificated repair station must ensure that each person authorized to approve an article for return to service understands, speaks, reads, and writes English.

(e) A certificated repair station must ensure that a person authorized to approve an article for return to service is available to inspect the article any time such approval is made.

**§ 145.1159 Recommendation of a person for certification as a repairman.**

A certificated repair station that chooses to use repairmen to meet the applicable personnel requirements of this part must certify in a format acceptable to the FAA that each person recommended for certification as a repairman—

(a) Is employed by the repair station, and

(b) Meets the eligibility requirements of § 65.101 of this chapter.

**§ 145.1161 Records of management, supervisory, and inspection personnel.**

(a) A certificated repair station must maintain and make available in a format acceptable to the FAA the following:

(1) A roster of management and supervisory personnel that includes the names of the repair station officials who are responsible for its management and the names of its supervisors who oversee maintenance functions.

(2) A roster with the names of all inspection personnel.

- (3) A roster of personnel authorized to approve for return to service a maintained or altered article.
- (4) A summary of the employment history of each individual whose name is on the personnel rosters required by paragraphs (a)(1) through (a)(3) of this section. The summary must contain enough information on each individual listed on the roster to show compliance with the experience requirements of this part and must include the following:
  - (i) Present title,
  - (ii) Total years of experience and the type of maintenance work performed,
  - (iii) Past relevant employment with names of employers and periods of employment, positions, and types of maintenance performed,
  - (iv) Scope of present employment, and
  - (v) The type of mechanic or repairman certificate held and the ratings on that certificate, if applicable.
- (b) Within 5 business days of the change, the rosters required by this section must reflect changes caused by termination, reassignment, change in duties or scope of assignment, or addition of personnel.

**§ 145.1163 Training requirements.**

- (a) A certificated repair station must have an employee training program approved by the FAA that consists of initial and recurrent training.
- (b) The training program must ensure that each employee assigned to perform maintenance, preventive maintenance, alterations, or inspection functions is—
  - (1) Capable of performing the assigned task;
  - (2) Trained in human factors relevant to aviation maintenance;

- (3) Trained in the Federal Aviation Regulations as they relate to Part 145; and
- (4) Trained in the repair station's manuals, quality control program, procedures, and forms.
- (c) A certificated repair station must document, in a format acceptable to the FAA, the individual employee training required under this section. These records must be retained for a minimum of 2 years.
- (d) A certificated repair station must submit training program revisions to its certificate holding district office in accordance with the procedures in the repair station manual as required by § 145.1209(e)(2).

**§ 145.1165 Hazardous materials training.**

- (a) Each repair station that meets the definition of a hazmat employer under 49 CFR 171.8 must have a hazardous materials training program that meets the training requirements of 49 CFR part 172, subpart H.
- (b) A repair station employee shall not perform or directly supervise a job function listed in § 121.1001 or § 135.501 of this chapter for, or on behalf of the part 121 or 135 operator, including loading of items for transport on an aircraft operated by a part 121 or part 135 certificate holder, unless that person has received training in accordance with the part 121 or part 135 operator's FAA-approved hazardous materials training program.

24. Amend part 145 by adding new subpart J to read as follows:

**Subpart J—Operating Rules**

145.1201 Privileges and limitations of certificate.

145.1203 Work performed at another location.

145.1205 Maintenance, preventive maintenance, and alterations performed for certificate holders under parts 121, 125, and 135, and for foreign air carriers or foreign persons operating a U.S.-registered aircraft in common carriage under part 129.

145.1206 Notification of hazardous materials authorizations.

145.1207 Repair station and quality control manuals.

145.1209 Repair station manual contents.

145.1211 Quality control system.

145.1213 Inspection of maintenance, preventive maintenance, or alterations.

145.1215 Capability list

145.1217 Contract maintenance.

145.1219 Recordkeeping.

145.1221 Service difficulty reports.

145.1223 FAA inspections.

## **Subpart J—Operating Rules**

### **§ 145.1201 Privileges and limitations of certificate.**

(a) A certificated repair station may—

(1) Perform maintenance, preventive maintenance, or alterations in accordance with part 43 of this chapter on any article for which it is rated and within the limitations in its operations specifications.

(2) In accordance with § 145.1217, arrange for another person to perform maintenance, preventive maintenance, or alterations of any article for which it is rated.



(3) Approve for return to service any article for which it is rated after it has performed maintenance, preventive maintenance, or an alteration in accordance with part 43 of this chapter.

(b) A certificated repair station shall not approve for return to service under part 43 of this chapter--

(1) Any article for which it is not rated;

(2) Any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it;

(3) Any article unless the maintenance, preventive maintenance, or alteration was performed in accordance with the applicable approved technical data or data acceptable to the FAA, and using methods, techniques, and practices acceptable to the FAA.

(4) Any article after a major repair or major alteration unless the major repair or major alteration was performed in accordance with applicable approved technical data; or

(5) Any experimental aircraft after a major repair or major alteration performed under § 43.1(b) of this chapter unless the major repair or major alteration was performed in accordance with methods and applicable technical data acceptable to the FAA.

**§ 145.1203 Work performed at another location.**

A certificated repair station may temporarily transport material, equipment, and personnel needed to perform maintenance, preventive maintenance, or alterations on an article for which it is rated to a place other than the repair station's fixed location if the following requirements are met:

(a) The work is necessary due to a special circumstance, as determined by the FAA, or

(b) It is authorized by the FAA to perform such work on a recurring basis, and the repair station's manual includes the procedures for accomplishing maintenance, preventive maintenance, or alterations at a place other than the repair station's fixed location.

**§ 145.1205 Maintenance, preventive maintenance, and alterations performed for certificate holders under parts 121, 125, and 135, and for foreign air carriers or foreign persons operating U.S.-registered aircraft in common carriage under part 129.**

(a) A certificated repair station that performs maintenance, preventive maintenance, or alterations for an air carrier or air operator under parts 121 or 135 of this chapter, or for a foreign air carrier or foreign person operating U.S.-registered aircraft in common carriage under part 129 of this chapter, shall perform that work in accordance with the instructions provided by that air carrier, air operator, or foreign air carrier or foreign person.

(b) A certificated repair station that performs inspections on an aircraft that is subject to an inspection program under § 91.409(e) or parts 125 or 135 of this chapter shall do that work in accordance with the inspection program provided by the operator of that aircraft.

**§ 145.1206 Notification of hazardous materials authorizations.**

(a) Each repair station must acknowledge receipt of the part 121 or part 135 operator notification required under §§ 121.1005(e) and 135.505(e) of this chapter prior to performing work for, or on behalf of, that certificate holder.

(b) Prior to performing work for or on behalf of a part 121 or part 135 operator, each repair station must notify its employees, contractors, or subcontractors that handle or replace aircraft components or other items regulated by 49 CFR parts 171 through 180 of each certificate holder's operations specifications authorization permitting, or prohibition

against, carrying hazardous materials. This notification must be provided subsequent to the notification by the part 121 or part 135 operator of such operations specifications authorization/designation.

**§ 145.1207 Repair station and quality control manuals.**

A certificated repair station must:

- (a) Prepare and follow repair station and quality control manuals acceptable to the FAA;
- (b) Maintain current repair station and quality control manuals;
- (c) Ensure the manuals required by this section are accessible for use by repair station personnel;
- (d) Provide to its certificate holding district office the current manuals in a format acceptable to the FAA; and
- (e) Notify its certificate holding district office of each revision to its manuals in accordance with the procedures required by §§ 145.1209(e)(7) and 145.1211(c)(3).

**§ 145.1209 Repair station manual contents.**

A certificated repair station's manual must include at least the following:

- (a) An organizational chart identifying—
  - (1) Each management position with authority to act on behalf of the repair station;
  - (2) The area of responsibility assigned to each management position; and
  - (3) The duties, responsibilities, and authority of each management position.
- (b) A description of the certificated repair station's operations, including the technical data, housing, facilities, equipment, and materials as required by this part;
- (c) A description of—

- (1) The required records and the recordkeeping system used to obtain, store, and retrieve the required records; and
- (2) The system used to identify and control sections of the repair station manual.
- (d) Procedures for revising the capabilities list if used, including—
  - (1) Submitting the revisions to the certificate holding district office for approval; or
  - (2) The self-evaluation permitted under § 145.1215(d)(2) for making changes to the capability list, including—
    - (i) Determining that the repair station has all of the technical data, housing, facilities, equipment, material, processes, and trained personnel in place;
    - (ii) Methods and frequency of such evaluations, including procedures for reporting the results to the appropriate repair station manager for review and action;
    - (iii) Notifying the certificate holding district office of changes to the list, including how often the certificate holding district office will be notified of changes; and
    - (iv) Documenting the self evaluation and periodic review, including making such documentation available to the FAA, and retaining it for a period of 2 years.
- (e) Procedures for—
  - (1) Maintaining and revising the rosters required by § 145.1161;
  - (2) Revising the training program required by § 145.1163 and submitting revisions to the certificate holding district office for approval;
  - (3) Governing work performed at another location in accordance with § 145.1203;
  - (4) Performing maintenance, preventive maintenance, or alterations under § 145.1205;
  - (5) Maintaining and revising a list of the maintenance functions approved by the FAA that may be performed under contract by another person in accordance with

§145.1217(a)(1), including submitting revisions to the certificate holding district office for approval;

(6) Maintaining and revising the contract maintenance information required by §145.1217(a)(2) including how and when the certificate holding district office is notified of revisions; and

(7) Revising the repair station's manual and notifying its certificate holding district office of revisions to the manual, including how often the certificate holding district office will be notified of revisions.

**§ 145.1211 Quality control system.**

(a) A certificated repair station must establish and maintain a quality control system acceptable to the FAA that ensures the airworthiness of the articles on which the repair station or any of its contractors performs maintenance, preventive maintenance, or alterations.

(b) Repair station personnel must follow the quality control system when performing maintenance, preventive maintenance, or alterations under the repair station certificate and operations specifications.

(c) The quality control manual must include at least the following:

(1) A description of the quality control system and procedures used for--

(i) Inspecting incoming materials to ensure acceptable quality;

(ii) Performing preliminary inspection of all articles that are maintained;

(iii) Inspecting all articles that have been involved in an accident for hidden damage before maintenance, preventive maintenance, or alteration is performed;

(iv) Establishing and maintaining proficiency of inspection personnel;

- (v) Establishing and maintaining current technical data for maintaining articles;
  - (vi) Qualifying and surveilling noncertificated persons who perform maintenance, preventive maintenance, or alterations for the repair station in accordance with 145.1217;
  - (vii) Performing final inspection and approval for return to service of maintained articles;
  - (viii) Calibrating measuring and test equipment used in maintaining articles, including the intervals at which the equipment will be calibrated;
  - (ix) Taking corrective action on deficiencies;
  - (x) Identifying and managing suspected unapproved parts; and
  - (xi) Ensuring that maintenance not completed as a result of shift change or similar interruption is properly completed.
- (2) A sample of the inspection and maintenance forms and instructions for completing such forms or a reference to a separate forms manual; and
  - (3) Procedures for revising the quality control manual required under this section and notifying the certificate holding district office of the revisions, including how often the certificate holding district office will be notified of revisions.

**§ 145.1213 Inspection of maintenance, preventive maintenance, or alterations.**

- (a) A certificated repair station must inspect each article upon which it has performed maintenance, preventive maintenance, or alterations as described in paragraphs (b) and (c) of this section before approving that article for return to service.
- (b) A certificated repair station must certify that the article is airworthy with respect to the maintenance, preventive maintenance, or alterations performed after—
  - (1) The repair station performs work on the article; and

(2) An inspector inspects the article on which the repair station has performed work and determines it to be airworthy with respect to the work performed.

(c) For the purposes of paragraphs (a) and (b) of this section, an inspector must meet the requirements of § 145.1155

**§ 145.1215 Capability list.**

(a) A certificated repair station may establish and maintain, in a format acceptable to the FAA, a capability list that includes all the articles for which it is rated to perform maintenance, preventive maintenance, or alterations.

(b) An article may be listed on the capability list only if it is within the scope of the repair station's ratings and operations specifications.

(c) Within the rating categories identified in § 145.1059, the capability list must identify each airframe, powerplant, or propeller by manufacturer, model, and series as applicable. For a component rating, the list must identify each component for which the repair station is rated by manufacturer, manufacturer-designated nomenclature, and basic part number.

(d) Changes may be made to the capabilities list:

(1) By submitting a request to the FAA for approval; or

(2) Upon application, as prescribed in § 145.1058, the repair station may request authorization in its operations specifications to make additions to the capabilities list through self-evaluation. The self-evaluation must be documented and include a determination that the repair station has all of the technical data, housing, facilities, equipment, material, processes, and trained personnel in place to perform maintenance, preventive maintenance, or alterations on the article in accordance with this part.

(e) Following changes to its capabilities list, the repair station must provide its certificate holding district office with a copy of the revised list in accordance with the procedures required in § 145.1209(d).

(f) A periodic review of the capability list must be accomplished at least every 2 years to determine if it is current. Following the periodic review, the capability list shall be revised to remove those articles for which the repair station no longer has the technical data, housing, facilities, equipment, material, processes, or trained personnel necessary to perform maintenance or alterations on the article.

**§ 145.1217 Contract maintenance.**

(a) A certificated repair station may contract a maintenance function pertaining to an article to another person provided—

(1) The maintenance function to be contracted is approved by the FAA; and

(2) The repair station maintains and makes available to its certificate holding district office, in a format acceptable to the FAA, the following information:

(i) The name of each person with whom the repair station contracts maintenance functions;

(ii) The type of certificate and ratings, if any, held by each person to whom the repair station contracts a maintenance function; and

(iii) The maintenance function(s) contracted to each person.

(b) If a maintenance function is contracted under paragraph (a) of this section to a person not certificated to perform the work, the repair station must:



- (1) Determine, in accordance with the procedures required under § 145.1211(c) (1) (vi), that the noncertificated person follows a quality control system equivalent to the system followed by the certificated repair station;
  - (2) Remain directly in charge of the work performed by the noncertificated person;
  - (3) Verify, by test and/or inspection, that the work has been performed satisfactorily and that the article is airworthy before approving it for return to service; and
  - (4) Ensure the repair station employee requirements of § 145.1151(c) are met when accomplishing the requirements of paragraphs (b) (1) and (b) (3) of this section.
- (c) A certificated repair station may not exercise the privileges of its certificate by providing only approval for return to service of an article following contracting of maintenance, preventive maintenance, or alterations.

**§ 145.1219 Recordkeeping.**

- (a) A certificated repair station must retain records in English that demonstrate compliance with the requirements of part 43 of this chapter. The records must be retained in a format acceptable to the FAA.
- (b) A certificated repair station must provide a copy of the approval for return to service in accordance with § 43.5 of this chapter to the owner or operator of the article on which maintenance, preventive maintenance, or alteration was performed.
- (c) A certificated repair station must retain the records required by this section for at least 2 years from the date the article was approved for return to service.
- (d) A certificated repair station must make all required records available for inspection by the FAA and the National Transportation Safety Board.

**§ 145.1221 Service difficulty reports.**

- (a) A certificated repair station must report to the FAA discovery of any serious failure, malfunction, or defect of an article in a format acceptable to the FAA. The report must be submitted within 96 hours of approving the article for return to service.
- (b) The report required under paragraph (a) of this section must include as much of the following information as is available:
  - (1) Aircraft registration number;
  - (2) Type, make, and model of the article;
  - (3) Date of the discovery of the failure, malfunction, or defect;
  - (4) Nature of the failure, malfunction, or defect;
  - (5) Time since last overhaul, if applicable;
  - (6) Apparent cause of the failure, malfunction, or defect; and
  - (7) Other pertinent information that is necessary for more complete identification, determination of seriousness, or corrective action.
- (c) The holder of a repair station certificate that is also the holder of a part 121, 125, or 135 certificate; type certificate (including a supplemental type certificate); parts manufacturer approval; or technical standard order authorization, or that is the licensee of a type certificate holder, does not need to report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported under parts 21, 121, 125, or 135 of this chapter.
- (d) A certificated repair station may submit a service difficulty report for the following:
  - (1) A part 121 certificate holder, provided the report meets the requirements of part 121 of this chapter, as appropriate.

(2) A part 125 certificate holder, provided the report meets the requirements of part 125 of this chapter, as appropriate.

(3) A part 135 certificate holder, provided the report meets the requirements of part 135 of the chapter, as appropriate.

(e) A certificated repair station authorized to report a failure, malfunction, or defect under paragraph (d) of this section must not report the same failure, malfunction, or defect under paragraph (a) of this section. A copy of the report submitted under paragraph (d) of this section must be forwarded to the certificate holder.

**§ 145.1223 FAA inspections.**

(a) A certificated repair station must allow the FAA to inspect that repair station at any time to determine compliance with this chapter.

(b) A certificated repair station may not contract for the performance of a maintenance function on an article with a noncertificated person unless it provides in its contract with the noncertificated person that the FAA may make an inspection and observe the performance of the noncertificated person's work on the article.

(c) A certificated repair station may not approve for return to service any article on which a maintenance function was performed by a noncertificated person if the noncertificated person does not permit the FAA to make the inspection described in paragraph (b) of this section.

**Subparts A through E [Removed and Reserved]**

25. On [24 months after publication of final rule], remove and reserve subparts A through E.

Issued in Washington, DC, on May 3, 2012.

Raymond Towles

Acting Director, Flight Standards Service

[FR Doc. 2012-11984 Filed 05/18/2012 at 8:45 am; Publication Date: 05/21/2012]